GAZETTEER

OF THE

BOMBAY PRESIDENCY.

VOLUME IV.

AHMEDABAD.

Under Government Orders.

Bombay:
PRINTED AT THE
GOVERNMENT CENTRAL PRESS.

1879.

THE chief contributor to this Volume is the District Compiler, Mr. F. S. P. Lely, C. S. Mr. Lely has, besides supplying materials for parts of the Manufacture and Agriculture Sections, prepared and revised the Description, Capital, Trade Guild, and great part of the Trade Chapters. Materials collected by the late Surgeon-Major C. Johnson have been of much use in preparing the Climate and Health Sections. The Survey and Sub-divisional details have been supplied by Mr. N. B. Beyts, Superintendent of Survey.

Since the Maps were prepared the official spelling of a few names has been altered. The changes are in no case so great as to cause confusion.

JAMES M. CAMPBELL.

July, 1879.

CONTENTS.

AHMEDABAD.

Chapter I.—Description. PAGE

Position and Area; Boundaries; Sub-divisions; Aspect . 1-3
Rivers; Floods; Creeks 4-15
Lakes; Islands; Climate 16-21

Chapter II.—Production.

Minerals; Trees; Animals... 22-30

Chapter III.—Population.

Census details (1846, 1851, and 1872) 31-33
Division by Race 34-44
Villages 45
Dwellings; Communities; Movements of the People ... 46-48

Chapter IV.—Agriculture.

Varieties of Soil; Distribution of Soil; Irrigation; Tillage; Size of a Plough of Land; Holdings; Stock; Crops; Tillage Details; Peasants; Bad Seasons ... 49-62

Chapter V.—Capital.

Capitalists; Bills of Exchange; Bank of Bombay; Insurance; Gambling, *váida*; Classes who Save; Modes of Investment; Borrowers; Rates of Interest; Currency; Fictitious Currency, *ánt* 63-73
Wages; Prices; Weights and Measures; State of Labourers 74-80

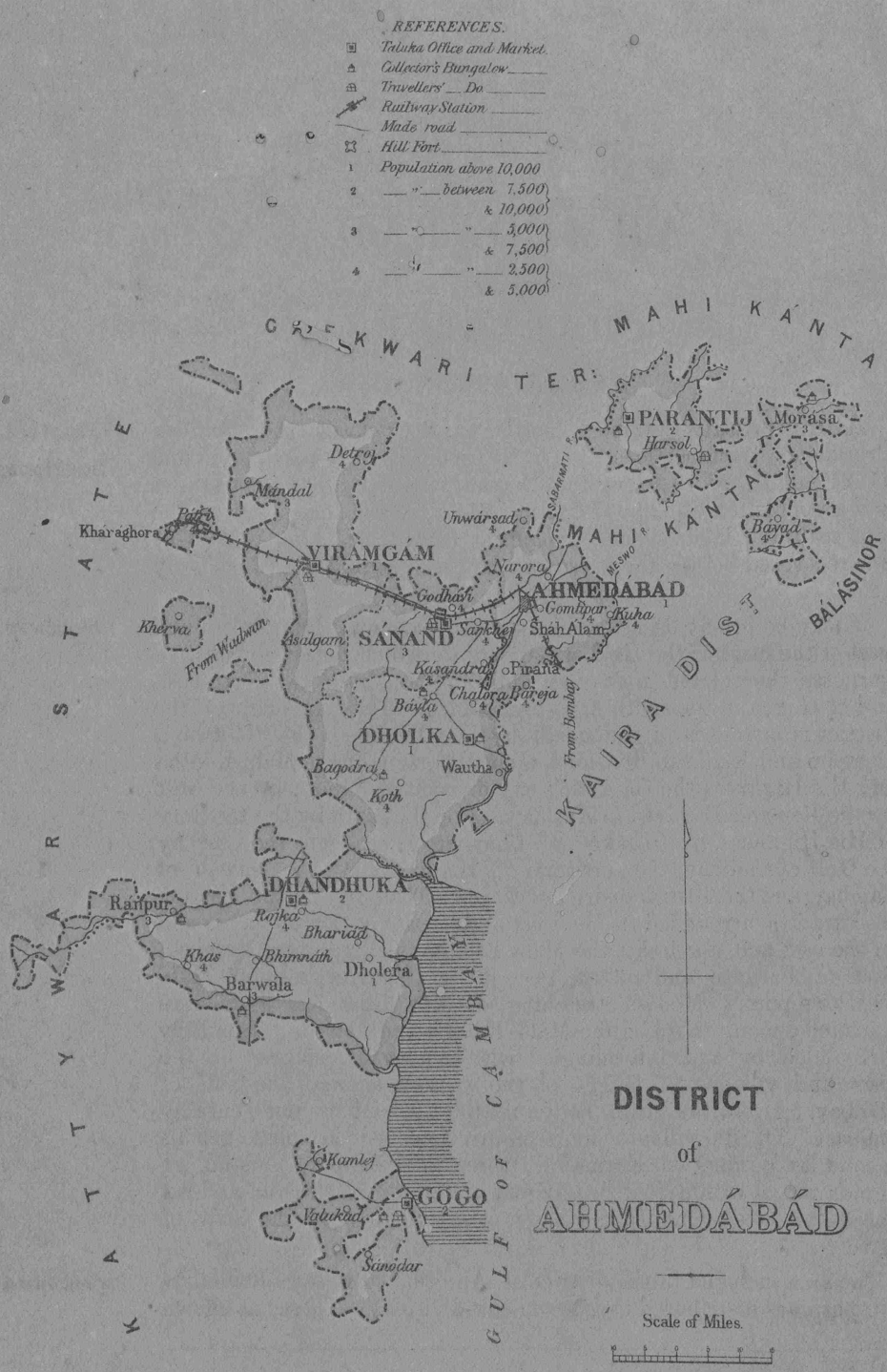
Chapter VI.—Trade and Manufactures.

Section I.—Trade.

Roads; Bridges; Rest-houses; Fords and Ferries; Shipping; Light-houses; Post and Telegraph Offices 81-85
Trade, Hindu Period (750 - 1300); Ahmedabad Kings (1400 - 1570); Moghal Viceroys (1570 - 1700); Eighteenth and Nineteenth Centuries 86-96
Sea and Land Trade Statistics. 97-104
Lines of Traffic; State of Traders 105

Section II.—Trade Guilds.

Origin and Growth; Constitution; Membership Apprenticeship; Jurisdiction; Communal Fun Sectarian Bickerings; Nagar Seth; An



Govt Photozincographic Office Poona 1877.

AHMEDABAD.

CHAPTER I.

DESCRIPTION.[1]

Chapter I. Description.

Ahmedabad, the most northerly district of the Bombay Presidency, lying between 21° 25′ 18″ and 23° 37′ north latitude and 71° 21′ and 73° 28′ east longitude, has a total area of 3854 square miles and a population of 829,637 souls or 215·82 to the square mile. The total realizable land revenue amounting to £142,587 (Rs. 14,25,870) was recovered before the close of the year ending the 31st July 1877.

Boundaries.

It may be briefly described as a tract of country lying north and west of the head of the Gulf of Cambay, to which for administrative purposes, the isolated lands of Parántij and Modása in the north-east, and of Gogha in the south have been added. The main body of the district is bounded on the north by His Highness the Gáikwár's Dehgám and Kadi sub-divisions, a small portion of the Mahi Kántha and His Highness the Gáikwár's sub-division of Pátan; on the west by the Ran and Jhálávád in Káthiáwár; on the south by the territory of His Highness the Thákor of Bhávnagar; and on the east by the Gulf of Cambay, the territory of His Highness the Nawáb of Cambay, and the British district of Kaira. The outlying sub-division of Parántij surrounded on the west and south by Baroda lands and on the east and north by the Mahi Kántha is completely detached. East of Parántij and cut off from it by a narrow strip of Mahi Kántha territory, Modása stretching south to Kaira has its villages scattered among those of the Mahi Kántha and Baroda. Similarly surrounded by and intermingled with Jhálávád villages lie the town and villages of Gogha on the western shore of the Gulf of Cambay. Even the main body of the district is not entirely compact. Of its villages fourteen are detached in small groups beyond its borders in Káthiáwár, three in Pálanpur, and six in Baroda, while within British territory are eleven Káthiáwár and six Baroda villages. One Idar village is surrounded by the lands of Parántij.

Sub-divisions.

The area included in the district of Ahmedabad is for administrative purposes distributed over seven sub-divisions. These, as shown

[1] This chapter is almost entirely the work of Mr. F. S. P. Lely, Bombay Civil Service.

Chapter I. Description.

the ground is an unbroken level, the prospect lavishly enriched on every side, except the north, with groves of various trees.

Aspect. *Western Section.*

Along the right bank of the Sábarmati the characteristics of Daskroi are prolonged into Dholka, but towards the west and south-west they disappear. In that direction the aspect shades off into the fertile but absolutely flat and monotonous black soil of the Bhál, slightly rising north-east of Viramgám into the sandy Chuvál, but sloping south and west in treeless fields of rice and wheat to the Nal, and in extensive salt wastes to the Ran. Beyond the river Bhogáva the black soil loses none of its remarkable productive power, but from the brackishness of its deep springs there is little irrigation. Year after year it yields, under utterly thriftless methods of agriculture, luxuriant crops of wheat and cotton, but presents to the traveller no tree for shade, no hedgerow to relieve his eye, often no drinkable water to quench his thirst. Here there is nothing to break the distant view but compact villages rising during the cold season like islands out of a level expanse of verdure, which is turned by the sun of April and May into an arid waste swept by scorching winds. The flats round Dholera and thence along the coast to Bávliári creek, impregnated with salt and intersected by marshes, show all the bleakness of the Bhál with none of its fertility. On the other hand along the western border the land changes into a reddish not unproductive soil of uneven surface, and yet a little further on a narrow strip of the district runs right into the rocky interior of Káthiáwár.

Gogha.

The little isolated sub-division of Gogha is in character as well as in position part of the province of Káthiáwár. It is broken into hills of crumbling limestone showing traces of volcanic disturbance, bearing nothing but here and there a stunted tree, and more or less abundant crops of grass. Numerous small streams flow through the country and the valleys are fertile, and well wooded.

Hills.

Only in the extreme north-east and south-west does the plain surface of the district rise into hills. In Modása are some ridges of metamorphic rock seldom more than 500 feet high, the sides covered with grass and brushwood. In the west a few miles from the town of Ránpur in Dhandhuka, a series of low hills gradually rises towards the parent range of Chotila, where a conical peak, 600 feet above sea level, is the most remarkable feature of the country. Some of the hills about Ninámа, the most westerly part of Dhandhuka, are covered with fragments of quartz and limestone. Further south the Khokra range in Gogha with a height of 96 feet runs north and south parallel with the Gulf shore towards which it throws out lateral spurs.

Rivers.

In the district are two distinct river systems; one flowing south-west from the highlands of eastern Gujarát; the other flowing east from the Káthiáwár hills. Among the rivers none is navigable or of more than local importance. The Sábarmati, with its tributaries the Khári, Meshva, and Májham, and the Shelva and the Andhári, rising from the northern hills and flowing to the Gulf of Cambay through the light-soil eastern lands, form one group. To the other belong the Bhogáva, Bhádhar, Utávli, Nilki, Pinjária, and A'dhia, which

Chapter I.
Description.
Rivers.
The Sábarmati.

flowing from the Káthiáwár hills struggle with more or less success through the shifting alluvial tract of black soil eastwards into the Gulf of Cambay.

Rising, under the name of Sábar, in the south-western spurs of the A'rávali hills not far from the popular shrine of Amba Bhaváni, the Sábarmati takes a southerly course through the Mahi Kántha till at the north-west corner of the Ahmedabad district it is joined by the Háthmati. From that point taking the compound name of Sábarmati it successively forms the western boundary of Parántij; separates the Baroda sub-division of Dehgám from that of Bijápur; bisects Daskroi into two fairly equal portions; separates Dholka from Kaira, and finally after flowing about 200 miles and draining an area of 9500 square miles [1] discharges itself into the Gulf of Cambay. In the upper part of its course its banks are very precipitous, in some places rising sheer to the height of 200 feet. But they gradually subside to from thirty to fifty feet opposite the city of Ahmedabad and still lower as they near the sea. The stream is for the most part shallow and sluggish, holding a winding and often changing way through a broad bed of sand. Even as far inland as Vághpúr the bed is no less than 300 yards wide, while fifty miles from the river mouth the distance from bank to bank is said to be about 1550 feet, with in the fair season a stream about 375 feet broad. A noteworthy feature of the river is the formation, by its frequently varying current, of tracts of mud deposit, *bhátha*. This, though the most fertile soil in the district bearing luxuriant crops of sugarcane and other valuable produce, is by sudden freshes liable to be overlaid with sand or entirely washed away. Nor are the changes of the stream confined within its banks, wide as they are. At several points between Ahmedabad and the sea the line of what was once its bed may still be traced a long way distant from its present course, and numerous abandoned village sites bear witness to former inundations on the adjacent country. Tidal influence extends twelve miles from the river mouth.[2]

The saving efficacy of the Sábarmati is not in such wide repute as to attract pilgrims from a distance. Few, however, of the many who pass through Ahmedabad on their way to more celebrated shrines

---

[1] Sanitary Commissioner, 16th July 1875.

[2] The following figures, showing the velocity and discharge of the Sábarmati, opposite the city of Ahmedabad, have been supplied by Mr. J. R. Hatherly:

Sábarmati Speed and Discharge, 1869.

Date.	Velocity, feet per second.	Discharge, cubic feet per second.	Date.	Velocity, feet per second.	Discharge, cubic feet per second.
1869.			1869.		
January ...	1·60	400	July ...	1·00	250
February ...	1·60	300	August ...	2·00	1500
March ...	1·25	260	September ...	2·00 to 4·00	1500 to 92,000
April ...	1·22	250	October ...	2·50	2000
May ..	1·18	210	November ...	1·90	1200
June ...	1·50	500	December ...	1·68	600

Chapter I.
Description.
Rivers.
The Sábarmati.

fail to take the opportunity of bathing at the holy bank, *ára*, of Dudheshvar, whose soil was consecrated by the denizens of paradise with the milk, *dudh*, of Kám Dugha the sacred cow, and where the eye of faith may still at times see jets of milk shooting above the dark waters of the river. Here are brought for burning the dead of the higher castes and wealthy Shudras, all others being taken to Behrámpur a less favoured spot lower down the stream. The title Dudheshvar is properly applied not merely to the usual bathing and burning place, the specific name of which is Chandrabhág, but to both sides of the river at this part of its course. On the right or north bank where now stands the shrine of Dudhia Mahádev, and which was, until recent floods, faced by handsome flights of steps, there lived, according to the A'tma Purán, the holy ascetic Dadhichi, who gave up his own bones to make a weapon by which Indra might be enabled to slay the impious Rákshas Vritrásur. The holy cow Kám Dugha came to eat up the flesh and remaining bones of the self-devoted saint, but one portion of them became transformed into the emblematic *ling*, which under the name of *Khadgadháreshvar*, or the God of the four-edged sword, still draws thousands of local worshippers. It is situated higher up the Sábarmati at the Sháhi Bág, and, together with an adjacent shrine of the Bhimnáth Mahádev, marks a locality on the river only less sacred than Dudheshvar and equalled by no other except the *Saptarishi ghát*, the seven saints' steps, on the left hand bank below the city walls. The Sháhi Bág is, more especially on each Monday in *Shrávan* (August), thronged by crowds of the religiously disposed, to purify themselves by ablution, and often to spend a little of their substance, or fulfil a vow, in feasting Bráhmans at the close of the day. Many who live in the neighbourhood of the 'seven saints' prefer to resort there during the month of *Shrávan* (August), but the great gathering of the year at that shrine takes place on *Bhádarva Sud 5th* (September), on which day the females of the city attend in great numbers. Besides these special places of resort, there are eight others at different points along the river between Jalálpur Hanumán opposite the cantonment on the north and the Sháhávádi bank on the south, at any one of which merit is to be acquired by devout bathing, and all of them are more or less frequented, particularly during the intercalary month, *Parsotam*. Vautha, a village on the Sábarmati, some distance below Ahmedabad and eight miles south-east of the town of Dholka, is held in much repute as the point at which seven rivers, the Sábar, the Háthmati, the Khári, the Májham, the Meshva, the Vátrak, and the Shedhi unite their waters. Ordinarily the only devotees who visit it belong to the immediate neighbourhood but every year a largely attended fair is held beginning on the day of the full moon in the month of *Kártak* (November) and lasting over five days.

The Khári.

The Khári rises two miles beyond the northern boundary of Parántij, through which, being joined at Chadasra by the Khárva a stream thirteen miles long, it flows over a winding and shallow bed in a south-west direction. Traversing Dehgám and the eastern half of Daskroi, it crosses a corner of the Kaira district and falls into the Sábarmati south of the village of Rasikpur after a course of about

105 miles. Its breadth is nowhere great and in many places does not exceed twenty feet. Of late years it has shown a strong tendency to break off due south near the village of Dámotván and join with the Meshva. An attempt has been made to prevent this by the erection of an earthen dam at the point of threatened divergence.

The Meshva.

The rivers Meshva, Májham, and Vátrak rise to the south of Dungarpur and run courses of about 126, 66, and 251 miles respectively. All three converge southward through Modása and uniting their waters join the Sábarmati opposite Vautha. Except the Meshva which passes through the east of Parántij and also cuts off a corner on the east of Daskroi, no one of the three enters the district of Ahmedabad after leaving Modása. They are all of the same character, being streams of small volume flowing for some distance from their sources over rocky shingly beds, and showing, where bordered by trees, bits of really picturesque scenery. Near Harsol on the high road from Ahmedabad, the Meshva is crossed by a bridge of brick masonry.

The Shelva and the Andhári are short and unimportant streams running through the southern half of Dholka into the Sábarmati on its right hand bank.

The Bhogáva.

The river Bhogáva, or rather that broken portion of it which flows through the Ahmedabad district, takes its rise in the Dholka village of Dhingra and runs southward for about ten miles where it is joined by the Omkár from the Limbdi territory. Thence it turns eastward and, after forming the boundary between Dholka and Dhandhuka for about eleven miles, empties itself into the sea by the mouth of the Sábarmati. It is chiefly fed by the Omkár to which of late years has been added the main current of the Bhádhar. During the rainy season the flood water of the Nal also passes into this river. It is a brackish stream with few practicable fords in its lower course.

The Bhádhar.

The river Bhádhar rises in the hills to the south of Chotila in Káthiáwár, and, pursuing a generally eastern direction, about eleven miles from its source enters the district of Ahmedabad at the village of Shekhdol. A shallow stream nowhere of any great breadth, it is even near its source seldom more than twenty feet below the level of the adjacent country. For some miles it divides British territory from the native state of Páliyád, and then flows on past the walls of the Ránpur fort, where it is joined by a petty stream called the Guma an island being formed at the point of confluence. Four miles further down on its northern bank, stands the fort of Nágnes, belonging with a small tract of surrounding land to the Wadhwán state. For about three miles the river runs again between British villages and then forms the southern limit of the petty native state of Kantháriа, four miles after leaving which it passes a detached piece of Limbdi on the south. From this point at the beginning of the present century it wound onwards by the town of Dhandhuka, and then turning southward flowed a short distance to the east of Dholera and emptied itself by a broad and deep mouth into the Gulf of Cambay. Two or three miles east of Dhandhuka it appears to have gradually headed up its own channel with silt, so that when

Chapter I.
Description.
Rivers.
The Bhádhar.

(1818) professional attention was directed to the subject, it was reported that the bed of the river in this part of its course was so nearly on a level with its banks that in the rainy season the freshes spreading over the country were lost.[1] All the facts are not clear, but it is at any rate certain that in 1817 the stream broke away at the point to which we have traced it above, and passing through the foreign villages of Rangpur and Chharoria effected a junction with the Omkár between the villages of Lolia and Fedra. In the year 1844-45, according to Mr. Fawcett, it reverted to its original channel, but this can only have been partially the case as unsuccessful attempts were made in 1848 and in 1852 to force it back by means of earthen dams at the point of divergence. At present some part of the rain flood makes its way as far as Dhandhuka, but the current disappears altogether near the neighbouring village of Khasta. About four miles to the south-east it takes a fresh start and though with much diminished volume pursues its old course. Its bed is only from three to five feet below its banks. Opposite Kasindra it is joined by a small tributary called the Dhári. About three miles north of Dholera a diversion to the village of Goghla is said to be the course of the old river, but the present scanty stream keeps to the west and flows on through salt wastes to the village of Khun whence, instead of passing southward, as formerly, it has since 1844-45 run due east into the Gulf. South of Ráhátaláv there is still a trace of the former channel by which a small volume of water finds its way through low-lying marshes into the estuary. On account of its connection with the port of Dholera, the early history of this river is of some interest. But the available information is scanty and, perhaps from the great fluctuations in rainfall, seems contradictory. The Surveyor General in his report quoted above (1818) states that it was always an inconsiderable stream, dry during eight or nine months of the year and quite powerless to keep clear the creek at its mouth. On the other hand, Mr. Dunlop then Collector calls it a lively stream flowing past Dhandhuka up to within six weeks of the monsoon. In his opinion the accumulation of sand and mud was due to the recent diversion of the stream.

The Utávli, Nilki, Pinjária, and A'dhia.

The river Utávli rises just within the limits of Káthiáwár to the east of the town of Páliyád, and being joined by a stream from Botád pursues a seaward course by the town of Barvála, but loses itself in the level swampy country near the village of Návra. Four or five miles north of the same place similarly disappears the river Nilki which starts at the village of Málanpur and flows past the monastery of Bhimnáth. The converging courses of these two channels suggest that they may once have united their waters and fallen into the part of the sea now represented by the Bávliári creek, and that they were arrested by a natural process similar to that which has taken place in the Bhádhar. Other blind rivers of little size and importance, in this section of the district, are the Pinjária and the A'dhia.

---

[1] Surveyor General to Government, April 29th, 1818.

Chapter I
Description.

Rivers.

The Rohor.

The Rohor or Rohr though called a river, is an irregularly defined depression without any embouchure which receives the drainage of a large tract of country in the western part of Sánand and Dholka. It extends north and south for a distance of about twenty-six miles. During the rainy season it contains a large body of water; but most of it spreads over the low flat land around the southern end of the channel and there, as always happens in such cases, does much mischief by bringing to the surface the salt of the subsoil. By the end of February nothing remains but some long deep pools in the neighbourhood of the villages of Kesrandi and Dumáli; these largely used during the cold weather for watering wheat, as they are fed only by surface drainage soon become stagnant and shortly afterwards brackish.

The Bujva.

A somewhat similar depression called the Bujva or Bojva in Parántij is said to be of comparatively recent origin. It extends for about sixteen miles from a little beyond the northern frontier of the district to the village of Jenpur where it meets the river Khári.

The Bokh.

The Bokh,[1] a broad and deep depression, begins near the meeting of the Háthmati and Sábarmati, and runs south through Parántij at from three to eight miles from the latter river. It is a chain of pools and morasses, the largest sheet of water in it, called the large Bokh, being about 156 acres in extent and averaging thirty feet in depth. The next in size, called the small Bokh, and lying opposite the town of Parántij, covers about thirty-five acres and is said to average four feet in depth.[2] Near the village of Mudhasna the course of the river Khári is merged into the Bokh, but for some distance farther the banks of the latter may be distinctly traced. According to a local tradition the Bokh is the original channel of the river Háthmati, the stream of which is said to have been directed into the Sábarmati by an embankment made under the orders of Sultán Ahmad I. (1411-1443) to increase the water supply of his new metropolis. This tale is not supported by any contemporary records and the striking resemblance of the banks of the Bokh to those of a river would, without any historical basis of truth, sufficiently account for the story. At the same time it is difficult to explain the formation of this singular hollow in any other way, and moreover it is not likely that the town of Parántij which stands on its eastern bank, would have been built on such a site had it not in that remote period been washed by a flowing stream. At present during the rainy season there is a considerable discharge of water from the Bokh into the Khári, but it ceases entirely before the hot weather sets in.

Floods.

In consequence of the ill-defined channels of the western rivers and the low level of the ground on the lower course of the Sábarmati, some parts of this district suffer periodically such heavy losses by flood, as would be irremediable if the soil were less fertile, or the credit of the cultivators less sound. Floods on the Sábarmati are mentioned in the years 1714 and 1739. In 1755 the rains were so heavy

1 Literally a fissure or chasm.
2 These dimensions are from a return supplied by the Collector, Mr. Borradaile.

Chapter I.
Description.
Floods.

as in many places to wash down the walls of the city of Ahmedabad. In 1813 the Sábarmati is said to have risen eighteen feet above its summer level, but no accurate data are preserved. In 1822 a small flood in the same river did such damage to crops as to call for remissions of revenue. In 1850 an overflow of the Utávli destroyed many houses but as the season was not far advanced, caused little loss of agricultural produce. In 1857 very heavy rains did much damage in the central part of the district, carrying away a section of the Gogha trunk road. In 1868 scarcely any rain fell until the 10th of August when it burst heavily, and during the next four days twenty-seven inches were registered in Ahmedabad.[1] The river Sábarmati, though much swollen, did not flood the city. But the rain together with the wind, which for part of the time blew with extreme violence, sufficed to destroy, besides movable property estimated at over £5000 (Rs. 50,000), no fewer than 9566 houses of the computed value of £95,116 (Rs. 9,51,160). Outside the walls the havoc was wide-spread. The Sábarmati in its lower course and also the western rivers overflowed their banks with disastrous effect. In the country traversed by the Bhogáva, where many of the inhabitants were graziers and where the inundation was specially high large numbers of cattle were washed away. Elsewhere throughout the district, but more particularly in the Dholka and Sánand rice villages, the destruction of agricultural capital by surface floods and by the over-flowing and bursting of ponds was immense. Exclusive of the city the damage was estimated at £317,234 (Rs. 31,72,340).[2] At Pátri 6851½ tons (191,840 *mans*) of salt valued at £28,776 (Rs. 2,87,760) were washed away. In the town of Viramgám no fewer than two thousand houses were seriously damaged, or totally destroyed; in that of Parántij seven hundred; in that of Dholka one thousand; in that of Pátri one thousand. Four villages were annihilated and fifteen human lives were lost. Finally, the destruction of a considerable part of the early, *kharif*, crops was completed by a subsequent drought which prevented those resown from reaching maturity. Government placed £1000 (Rs. 10,000) at the disposal of the Ahmedabad municipality to spend on improvements, and granted £2000 (Rs. 20,000) to help the destitute to rebuild their houses and to procure necessaries. Limestone and clay fees were remitted and an assignment made for the repair of ponds and reservoirs. The Bombay, Baroda, and Central India Railway Company carried timber at reduced rates and a relief fund of £3135 (Rs. 31,350) was raised by private charity. By these means, and still more by the fortitude and patient industry of the agricultural classes, the flood ravages were soon repaired, and though the great scarcity of Indian millet straw reduced the people to straits for fodder, all outward traces of the calamity had been effaced by the end of the next cultivating season.

1868.

---

1 Collector's Reports dated 4th September and 2nd November 1868.

2 The following were the chief items: 42,203 houses, £157,958 (Rs. 15,79,580); 6396 cattle, £5894 (Rs. 58,940); crops, £142,569 (Rs. 14,25,690); ponds exclusive of wells and embankments, £10,813 (Rs. 1,08,130).

Chapter I. Description. Floods. 1875.

The next flood,[1] the highest on record, occurred in 1875. For some days before the 21st September the weather in and around the city of Ahmedabad was exceedingly broken, indicating atmospheric disturbances extending over a very large area. The explanation was soon forthcoming. Reports from Idar, the central registering station of the Sábarmati catchment basin, showed for the four days ending with the 23rd, a rainfall of 21·25 inches, figures which, according to the ordinarily observed proportion, would represent only one-third of the fall in the hills to the north. To the east the flood waters did not leave the deep-cut river bed. But after it had burst into the low-lying country of Daskroi, these barriers gradually declining towards the sea, imposed less and less restraint upon it at every mile, while near the river mouth very high spring tides forced back the flood waters. On the evening of the 21st, without any local rainfall, the gauge opposite the city showed five feet above the ordinary rain weather level. At eight o'clock on the following morning the water had reached the flood line of 1868. At noon it swept away the screw pile railway bridge three miles above the city. An hour later, it was breaking against the Ellis Bridge in eight feet high waves. Shortly afterwards there was a great noise as if the piers were being loosened from below. Trembling violently the structure began to bulge till at the centre it was about one foot out of line. Then of its twenty-three spans eight snapped, turned over, and were carried off on the top of the flood.[2] During the afternoon the water continued steadily to rise breaking off one more span on each side, and standing in the evening at five feet above the 1868 level, or altogether at nineteen feet above that of the ordinary summer stream. On the morning of the 23rd the bridge had lost eight more spans. The flood stood five feet lower, but soon swelling again destroyed two more spans at noon and at five in the afternoon reached its maximum height of twenty-two feet above the ordinary summer level.[3] Opposite the city the computed sectional area of the stream was 38,035 square feet, its velocity calculated by the general formula 11·60 feet per second, or a discharge per second of 440,000 feet.[4] A large portion of the city was now under water[5] and an anxious

---

1 The details of the flood of 1875 have been obtained from the records of the Executive Engineer for Irrigation, the District Executive Engineer, and the Collector.

2 From notes by Mr. Clarke, C. E., Executive Engineer for Irrigation.

3 The maximum height of the flood as marked on the bastion close to the Ellis Bridge was about 9·7 feet above that of 1868, but in this place there was a back-water caused by the bridge and its approach. Captain Cruikshank, R.E, District Engineer.

4 These figures have been supplied by Mr. J. R. Hatherly, Executive Engineer for Irrigation. In his opinion the formulas give far too high a result for rivers with such a great fall and such irregular beds as those of Gujárat. He notes that during the 1876 flood the actually measured velocity in the Narbada was only about one-half of the calculated speed. He doubts if at this time the Sábarmati stream was running more than seven or eight feet a second, that is, about five miles an hour.

5 The following are some of the flood readings: municipal office south-east corner, above ground, 7″; mission school compound wall south-east corner, above foundation, 2′ 8″; Bhadar new south gate, above the ground, 3′ 6″; Khánpur gate east side abutments of arch, above ground, 6′; Káḍgis mosque east entrance gate, below gate sill, 1′ 1″; Kazi's house at Sháháp̄ur south-west corner, above ground, 2′ 11″; Sháháp̄ur gate north-west corner of the seat, *otla*, below the seat, 3′ 6″; south-east corner of Rupráni's mosque at Mirzápur, above ground, 4′ 0″; Daskroi mámlatdár's

Chapter I.
Description.
Floods.
1875.

night set in, made all the more dismal by the crash of falling houses, and the cries of the unfortunate people who had lost their property and were in danger of losing their lives. The morning of the 24th showed a fall of eight feet, but at 8 a.m. a rise once more set in and continued amid universal dismay, until 2 p.m., when to the intense relief of all, the water line began steadily to recede, and by the evening of the 25th the river had completely retired into its natural channel.

The reported total number of lives lost was twelve. The chief single items in the list of property destroyed were the railway and the Ellis bridges. The former completed in October 1870 at a total cost of £39,327 (Rs. 3,93,270) carried the Wadhwán extension of the Bombay, Baroda, and Central India Railway over the river at a point near the Sháhi Bág, about three miles above the city. The piers were formed of four columns of Mitchell screw piles, 2′ 6″ diameter each, those up and down stream being level with the bed of the river at which point they were braced. The two central columns supported the superstructure and on the up-stream side were protected by heavy wooden booms. Their depth under the bed varied from fifty-four to twenty-three feet. The superstructure consisted of eighteen spans, of sixty-two feet six inches each, on Warren's pattern. This bridge situated below a sharp turn in the river was entirely submerged. Its fall is chiefly attributed to the shocks given by large masses of heavy timber brought down on the flood.[1] The Ellis bridge, named after Mr., now Sir Barrow, Ellis under whose auspices as Revenue Commissioner N. D. it had been designed, supplied a passage across the river for all the cart traffic that converged to Ahmedabad on the west bank of the Sábarmati. Connected with the A'stodiya road, this bridge formed an important link in a great line of communication between almost the whole of the district and the terminus of the railway from Bombay. It consisted of twenty-three spans of sixty feet each. The roadway was forty feet wide, and was carried on four Warren girders with four inch planking. Each pier consisted of eight wrought-iron piles with cast-iron screws. These were placed in a double row, the extreme width of each pier being six feet three inches. The railings were of cast-iron. The abutments were faced with cut-stone. The whole work had been executed on contract by Mr. A. Forde; the bridge being opened for traffic in 1870. Its total cost £54,921

office south wall, above ground, 3′ 1″; Lál gate east side pillar of archway, above sill, 4′ 10″; north-west corner of covered reservoir of Khás bazár, above ground, 8′ 3″; Tin Darvaja north-east pillar of arch, above ground, 6′; east entrance gate of Jáma mosque north-east and south-east abutments of archway, above sill, 9″; Daryápur gate north-west pillar of archway, above sill outside, 2′ 2″; Premábhái gate north-west pillar of archway, above ground, 1′ 4″; north-east tower of Arsenal compound wall north-east side, above ground, 8′ 9″. It is worthy of note that, compared with the level of the central stream, the water along the city walls stood four feet higher at the Sháhápur gate, six feet at the Delhi gate, and seven feet at the Daryápur gate.

1 The details of the former railway bridge have been supplied by Mr. H. B. Hargrave, Resident Engineer, Bombay and Baroda Railway. Those of the Ellis Bridge are taken from the Administration Reports of the P. W. D. for 1869-70 and 1870-71.

(Rs. 5,49,210), including approaches, had been met by Government, and the expense of maintaining it by the Ahmedabad Municipality.

Chapter I. Description.

Floods. 1875.

Inside the city 3887 houses valued at £58,208 (Rs. 5,82,080) were in ruins. The destruction of furniture, grain, and other miscellaneous property baffled accurate calculation, but was roughly computed at £16,459 (Rs. 1,64,590). Outside the walls 101 villages, on both banks of the river, were affected. In some cases the inhabitants had to flee for their lives to the tops of trees and mosques, while in others, more happily situated, the injury was limited to the loss of a few crops. In the rural parts of the district the damage done was estimated at a total sum of £138,405 (Rs. 13,84,050).[1] 4289 acres of arable land assessed at £1353 (Rs. 13,530) and many wells were either for a time or permanently made useless by silt deposits. The miscellaneous loss was probably inconsiderable. Villagers have seldom much house furniture, and in view of the approaching harvest, their stocks of grain for family consumption had been well nigh exhausted.

Strenuous and entirely successful efforts were made by the responsible Government officers and by private individuals to relieve the destitute by doles of food and clothes. The news of the calamity had no sooner spread than private subscriptions amounting to the sum of £14,528 (Rs. 1,45,280) began to flow in. The brunt of the burden of relief was borne by Government, who granted £5000 (Rs. 50,000) to help the poorest sufferers; directed the forest department to supply building timber free of cost to the villagers and to the city at half price;[2] remitted the usual fees on the excavation of sand, clay, and lime; and sanctioned the advance of £10,000 (Rs. 1,00,000) to enable cultivators to buy seed, cattle, tools, and other agricultural stock. Rent remissions were not, as a rule, found necessary. On the contrary so little was the cultivators' credit affected, that out of the large sum offered as advances, only £70 (Rs. 700) were actually taken, though loans fettered by none but the simplest formalities and without interest or other charges were freely given to every needy applicant of good character.

Creeks.

Under the head of creeks may be mentioned those of Dholera, Bávliári, and Gogha.[3]

Dholera.

Ever since the foundation of the village of Dholera its name has probably been given to some though not always the same inlet of the sea. This part of the country is specially subject to rapid change. The river Bhádhar always shifting, completely altered its course within the present century, depriving its estuary of a most useful scour. Remarkably strong tides according to some observers, and again a decrease in their violence according to

---

1 The details are; 6476 houses, £50,741 (Rs. 5,07,410); 2096 animals, £896 (Rs. 8960); field tools, £17,806 (Rs. 1,78,060); standing crops, £68,962 (Rs. 6,89,620).

2 Exclusive of cart and railway hire, the value of the timber given outright was £15,085 (Rs. 1,50,850).

3 The Sábarmati river has a wide mouth but it is choked with sand banks and has no convenient harbour.

Chapter I.
Description.
Creeks.
Dholera.

others, have helped the heaping up of silt.[1] These together with the great mass of soil yearly brought down by the Sábarmati and Mahi have led to the encroachment of the land round the head of the Gulf which Tieffenthaler noticed a century and a half ago, and which have probably been in gradual progress since the days when Káthiáwár was an island.[2] The earliest item in the history of the Dholera creek, is a local tradition pointing to the Morái Máta, a spot just north of the town and about seven miles west from the nearest point of the present coast-line, as the place of anchorage in the sixteenth century. At the end of the eighteenth century, the river Bhádhár was flowing a short distance east of this, broadening into an estuary thirteen miles south of the present Dholera creek, and just above the creek of Bávliári. Up this passed all vessels bound for these parts, but already in 1802 they ascended no higher than Khijra about one mile south of the present Khun Bandar. In 1806 Sir Miguel de Souza, sent by the Bombay Government to inquire into the natural advantages of the port, describes the river mouth as 'both fine and deep, having water enough for *batelás* of 143 tons (400 *khándis*) to go in and out with great safety.' Two years later (1808) Lieut. Ballantine informed the Collector of Kaira that 'the port was so well calculated by nature for the landing and loading of merchandise that it could not be improved by art. The most weighty goods were taken by carts within a few yards of the vessel and hoisted on board from a bank.' In spite of this prosperous account silt was rapidly gathering. Though the British port was established at a point below Ráhátaláv nearer the sea than any of previous resort, it had in 1819 to be moved still lower. When surveyed[3] in 1822, the only passage was between sand banks and mud flats, perfectly dry at the first third ebb, and only covered about three or four hours in the twelve, with from three to nine feet during the neaps, and from eight to fourteen feet on the springs. The four mile passage to the landing place was in some places nearly choked by sand. The soundings were irregular. At high water springs they varied from three to thirty feet, but at low tide for nearly nine hours together, the creek and several miles below it were left dry. The tides were very strong, the flood coming in with great force in an instant, strong enough to upset any grounded vessel caught broadside. The creek and the part of the Gulf leading to it were extremely dangerous. Even with expert seamen vessels above the size of small boats ran great risk in frequenting it. In consequence of this report and of the number of accidents constantly taking place at Dholera, Government in 1823 declared Bávliári a public port. This for some years during the busy season

---

[1] The Surveyor General in his report of April 29th, 1818, remarks that 'the tide, particularly in the springs, rushes in and out of the (old) creek with a rapidity and strength not perhaps exceeded by the tides in any part of the world. This often no doubt tears away large pieces from the mud banks of the creek and is probably the cause of the changes in its state.' The tides are still (1878) said to be much stronger here than in any other part of the Gulf.

[2] See under 'Nal,' page 16.

[3] Lt. Dominiceti, 28th Nov. 1822. Bom. Gov. Rev. Rec. 76 of 1823.

drew off most of the shipping. 'People say,' wrote Mr. Crawford in 1826, 'that about nine years ago spring-tides went nearly four miles higher up the Dholera creek than at present. In time the landing place will become completely dry.' Within ten years Mr. Crawford's forecast proved true. The estuary was altogether abandoned and the port removed to A'mbli some miles up the coast. But A'mbli was found little better than Dholera. In 1846 the port was changed to the old Khun Bandar at the mouth of the outlet by which the Bhádhar had lately forced a new way for itself to the sea, and which has since borne the name of the Dholera creek. In 1850 the anchorage was moved about four miles nearer the town to the spot now called Khun Bandar, and there vessels have since continued to load and discharge cargo. At this place an embankment raised above the level of spring tides was in 1869-70 re-built at a cost of £427 (Rs. 4270) paid out of the local funds.[1]

Bávliári.

The Bávliári creek called after a village near its head is an arm of the sea running inland at a point sixteen miles south of the entrance to the present Dholera creek. A section of it forms the boundary between British territory and the Bhávnagar state. When surveyed in 1822 it was about eight miles long, running nearly north-west, and for about five miles from 550 to 600 feet broad, and beyond that gradually narrowing and losing itself. At high water springs the soundings varied from twenty-six to thirty-five feet, and at low water, except for the first one and a half miles from the entrance, it was nearly dry. At neap-tide high water it had seldom less than twenty-three feet of water; and it was not dry for more than two and a half or three hours in the twelve. The flood ran about one and three-quarters, and the ebb about two and a quarter miles the hour. It was high water on the full and change, at the entrance at 4h. 32m. and about five miles up at 5h. 36m. P.M. The bottom was mostly mud, and mud and sand mixed, where vessels might ground with the greatest safety without the need of shores. It seemed well suited for trading purposes. Even during the neaps, country vessels of the largest size might frequent it with the greatest ease and safety, passing with little difficulty up and down with one tide. On the left bank four and a half miles up, was a good site for a port with, running west for about 800 feet, an inlet or creek where vessels might load and unload. The banks of the creek were generally above spring tide high-water mark, and the ground was well covered with trees and rich grass. Till about the end of February there was abundance of fresh water in the neighbourhood, and during the hot weather months supplies could be brought from the large and flourishing village of Bávliári distant only two and a quarter miles to the north-west. In spite of these advantages, Bávliári from the marshy and difficult character of the country inland has never risen to be a place of any considerable trade.

---

1 Of late years boats could not leave the creek from the 5th to the 11th of either half of the month. But the heavy floods of 1878 so swept out the silt that a laden boat can now (1879) pass out at any flood tide, see below 'Dholera.'

Chapter I.
Description.
Creeks.
Gogha.

At the town of Gogha is a little creek, dry at low tide but at high water offering an entrance to small craft. Large vessels ride at anchor about a quarter of a mile off the landing place, the roadstead giving good holding-ground and being well sheltered. The island of Piram and several rocky reefs break the force of southerly winds, sand banks protect it on the north, and very strong easterly winds are rare.

Lakes.
Nal.

Thirty-seven miles south-west of Ahmedabad, the Nal covers an area of forty-nine square miles most of it under water all the year round. Fed from the northern uplands it is said sometimes to run dry after a year of scanty rainfall. It is a shallow and in most parts muddy lagune, seldom more than six feet deep, surrounded by dreary flats relieved only by plants and bushes of the rankest and coarsest growth. The northern, western, and southern sides, without any well-marked banks are covered by tall nearly impenetrable reeds and high growing grass. To the east the land rises in wave-like mounds of loose sand, thrown up by the strong south-west wind, much like the hillocks that fringe the Broach sea-shore. Somewhat far apart, with between them wide bare silt-crusted bays, these wave-like sand hills stretch north-west from the Nal. Soon after the rains are over, in the shallow parts the Nal water is brackish, and by the end of March it is salt. Myriads of water birds find a home in its marshes, and during the hot season its little grass-covered islands are a grazing ground for herds of cattle. The reeds, of which there is a most luxuriant growth, are valued as thatch, and for their small dark-coloured bulbous roots. These sun-dried, freed from their sheath of poisonous fibre, and ground into flour make a sweetish pleasant-tasted bread nourishing to those used to it, but to strangers irritating and unwholesome, and except by the poorest classes, or in seasons of scarcity, little used as an article of food.

It is probable that the Nal and the lower course of the river Bhogáva, together represent what at no very distant date was an arm of the sea, which possibly at a still earlier time combined with the Ran of Cutch to isolate Káthiáwár from the mainland. 'Hardly any inhabited country,' wrote Mr. Melvill in 1827, 'can be much lower than the isthmus between the Nal and the Ran. During heavy rain it is entirely overflowed, changing the peninsula into an island; and if the rain is very heavy or lasts long, the water of the Rán flows into the Nal, and from the Nal finds its way into the Gulf of Cambay'.[1] Stones bored through the centre are sometimes still found in the Nal, and are belived by the people to be ancient anchors.[2] A popular local legend tells how in the days when Krishna was incarnate, the now shallow lake was a part of the great ocean, and how on one occasion a very high tide washed from

---

1 Bom. Gov. Sel. X 69.

2 Dr. Hové, so late as 1788, was told that at every high spring boats came from Bhávnagar for salt as far up as Partanváda under Mithápur, and that cotton was exported from the same place to Broach and Surat. Bom. Gov. Sel. XVI, 121.

the shore all the sandpipers' eggs. The bereaved parents called a general assembly of the birds, who making common cause began to bring earth in their beaks to dam out the greedy sea. The haughty eagle, Krishna's steed, not having attended the assembly, was put out of caste, and at his next visit was received with contumely. Forced to do something to retrieve his position, he persuaded his master to restore the lost eggs, and the birds gave over building their dam. This tradition seems in mythical dress to show, at once the former character of the country, and the gradual shrinking of the sea.

Chandola.

Besides those noticed above, the district contains no natural lakes of any importance, but its ponds and reservoirs cover an area of 13,946 acres. Especially in the parts of Dholka, Daskroi, and Viramgám formerly traversed by Vanjárás and pastoral tribes, they are large, their stores of water far exceeding the wants of the villages where they are found. The Chandola reservoir, about two miles south of the city of Ahmedabad near the tomb of Sháh A'lam, is embanked with earth and circular in form, and covers an area of 181 acres. To face the sides with stone would seem to have been part of the original plan. But this for some reason was never carried out. 291 acres are assessed as irrigable from it, but much of this land lies within its own bed as it seldom retains any depth of water long after the close of the rains.

Kánkariya.

About ¾ of a mile from the Ráypur gate is another reservoir called the Hauz-i-kutub, Kutub's pond, or the Kánkariya, that is, the limestone lake.[1] This reservoir, probably the largest of its kind in India, covering seventy-two acres and more than a mile round is a regular polygon of thirty-four sides, each side 190 feet long. It was, when completed by Sultán Kutub-ud-din in 1451, entirely surrounded by many tiers of cut stone steps with six sloping approaches flanked by cupolas and an exquisitely carved water sluice. In the centre of the lake, connected with the margin by a forty-eight arch viaduct was an island with a garden called Nagina or the jewel,[2] and a summer palace called Ghattamandal, a favourite resort of the later Ahmedabad kings.[3] In 1781 the approaches and their cupolas were in ruins, the sides of the lake in bad repair, the bridge fallen in, and the island with no trace of a garden or a palace.[4] In this state it remained till, in 1872, the Collector, Mr. Borradaile, undertook its

---

[1] Of the name Kánkariya two stories are told, one that the lake was so called from the quantity of limestone, *kankar*, dug out of it; the other that a pebble, *kánkra*, that found its way into the king's shoe, when he came to see the works, had the honour of giving the lake its name.

[2] Most of the details relating to the Kánkariya tank have been taken from Mr. Hope's notes on the Architecture of Ahmedabad.

[3] In the seventeenth century this lake was one of the sights of Ahmedabad. Della Valle (1623) thought it one of the most remarkable places in the world. Letters, 98. Thevenot (1666) calls it a great lake with a beautiful garden in the middle, approached by a bridge 400 paces long. At the end of the garden was a very pleasant building. Voyages, V. 22. Mandelslo's account (1638) is confused. He speaks of a Naginabág close to the Sháhi Bág on raised ground with a lake and wells in the garden. Voyages, 86.

[4] Forbes' Or. Mem. III. 131.

Chapter I. Description.

Lakes.

Kánkariya.

repair. Since then a road 6600 feet long has been made from the lake to the Ráypur gate. The high banks of the lake have been put in order and planted with trees, and the stone slope and steps of the inlet on the north side repaired. The lake has been cleared of silt; the south retaining wall has been restored; and a flight of steps built from the top of the viaduct down to the embanked causeway leading to the island. Of the arched masonry causeway connecting the bank with the island, a small portion has been restored, and for the rest of the distance an earthen bank has been thrown up. In the island the surrounding masonry wall has been re-built; on all four sides steps have been made; a new pierced parapet wall has been built; a well has been cleaned out; the central fountain put in order; the north garden house renewed, and the open ground dug, cleared of bricks, and filled with good soil. It is proposed (1879) by a canal eleven miles long to connect the Kánkariya lake with the Khári river and to use its waters to supply the Chandola lake to the north-east of Batva.[1]

Malik Shábán.

The Malik Shábán lake, though hardly inferior in size, is less known, being situated in an unfrequented spot two and a quarter miles east of the city near the village of Rakhiál. It is stone built of an octagonal shape including an area of seventy-one acres. Its sides are in good preservation but its bed is so silted up as to hold no depth of water.[2]

Sarkhej.

The Sarkhej lake, built by Mahmud Begada (1459-1511) near the tomb of Shaikh Ahmad Kháthi Ganj Bakhsh at Sarkhej, is a very fine work oblong in shape. Its symmetry is somewhat spoilt by the subsequent construction of Mahmud's and his family's mausoleums on the north-east corner. The sides of the lake consist of the usual tiers of steps of cut stone, and the area of the bed is over twenty-six acres. The general depth of water is seven feet.

Mansar.

The Mansar less commonly called the Mainal-sar lake on the west of the town of Viramgám was, like the Maláv at Dholka, built during the regency of Mainal, or Minal Devi, the mother of Sidh Ráj, the great Solanki prince of Pátan (1094-1143). It contains, all the year round, water of an average depth of twelve feet. Though the area is smaller than many others in the district, being only fifteen acres, its richly sculptured shrines relieving the bare lines of its steps, though now diminished in number and going to decay, give it a special beauty. Irregular in shape, it is popularly believed to have been built in imitation of the form of the conch shell, the Hindu war-trumpet. Each of its small spire-covered shrines, supposed to have once equalled the days of the year and still more than three hundred in number, is on one side of the lake furnished with a pedestal, and on the other with a circular

---

1 Ex. Eng. Irrigation, 357, dated 12th March, and 602, dated 24th March 1879.

2 The area and depth of the water of this and other reservoirs are taken from a return furnished by the Collector.

3 Strictly speaking it is in the village of Makarba, near Sarkhej.

Chapter I.
Description.
Lakes.

basin, *jaládhár*. It is supposed that the former were consecrated to Shri Krishna and the latter to Mahádev. The water, collected from the surrounding country, passes first into a deep octagonal silt trap, *kund*, faced with stone and on each side ornamented with a niche containing a figure sculptured in bold relief. From the *kund* the water passes by a masonry-lined channel through a sluice into the lake. The sluice is divided into three cylinders and on a terrace over it is placed a large pavilion with pyramidal roof. This building, restored in Marátha times, has on one side been built up and dedicated as a temple to Máta Bechráji. Round the lake the flight of steps is in several places crossed by roadways passing down to the water's edge. On either hand of one of these stands a larger temple, formed of a porch, *mandap*, with a double inner chamber and spire, and in the corresponding position on the other side of the lake is a flat roofed colonnade.

Maláv.

The Maláv, less commonly called the Mainal lake in the western outskirts of the town of Dholka, covers an area of over forty-eight acres and holds a perennial supply of water not less than fifteen feet in depth. It is said to have been built by the mother of Sidh Ráj and completed in the year 1115 (511 H.). Mr. Forbes tells the following story of its construction: 'On the east was a courtezan's house which as it interfered with the symmetry of her design the Ráni proposed to purchase for a large sum of money. The owner, however, declined to part with it, remarking that her name would be rendered as famous by the refusal as that of the queen would be by the construction of the reservoir. Mainal Devi was too upright to employ force and her conduct in the matter though it produced an irregularity in the tank, which is still apparent, procured for her government a reputation preserved in the local proverb, 'Would you see justice, visit the Maláv.'[1]

Khán.

The Khán lake, also on the west of the town of Dholka, is reputed to have been built about the end of the fifteenth or the beginning of the sixteenth century by one Sarvar Khán from Delhi. Octagonal in shape, it covers twenty-five acres, and holds water all the year round of an average depth of ten feet. On an island in the middle is a ruined building, approached by a stone viaduct still kept in fair repair at the cost of the local municipality.

Multán.

The Multán lake, on the north-west corner of the town of Dhandhuka, is twenty acres in extent and is surrounded by masonry walls now in great disrepair. There are no steps and all the water dries up in the hot season. It is said to have been built by a Moghal officer whose name it bears.

Dholera.

At Dholera has been constructed out of the local 'Dharm Taláv Fund' a reservoir measuring sixty acres, having stone walls on three sides and on the fourth a flight of steps.

Sonaria.

Near Gogha the Sonária reservoir through an underground channel supplies the town with water. It is rectangular or nearly square in shape and covers more than forty-eight acres.

---

[1] Rás Mála, 83.

[2] Details are given under Gogha.

Chapter II. Description. Islands.

With the exception of Piram the only island belonging to this district is a small one at the mouth of the Sábarmati. In former times its *pilu*, Salvadora persica, and *pilausi* bushes were a favourite haunt for lions and tigers.

Piram lies in the Gulf of Cambay about four and a half miles from Gogha. A detailed account of this island is given below under the head 'Places of Interest.'

Climate.

Except in the hilly country of Modása where the supply is sometimes considerable the rainfall throughout the district is generally very light. The registered rainfall in the city of Ahmedabad during the seven years ending 1848, gives an average of 27·69 inches; that from 1853 to 1860 an average of 35·87 inches; and that from 1870 to 1878 an average of 32·13 inches. The rainy season generally begins in the latter part of June, expends its greatest strength in July, and gradually loses force till its close about the end of September. It is the popular belief of the cultivating classes, not without some apparent corroboration from statistics, that of late years the rainfall has shown a tendency to cease at an earlier period than formerly.[1]

In the cold season (November - February) though the range of temperature is very great, and the cold, especially with a dry north-east wind, seems very severe, the thermometer rarely goes below the freezing point.[2] From March until the rains begin, the wind, turning to the west, grows heated in the day time. February and June are said to be usually the healthiest months, and October the most sickly.[3] In that month, except in Gogha where blows a fresh and healthy sea breeze, the climate is close and miasmatic fevers are common. The thermometer readings in the shade in the city, which may be taken as a fairly representative locality, give the following results:

---

1 The available details for the city of Ahmedabad are:

Ahmedabad Rainfall, 1842-1878

Year	Inches	Cents.	Year	Inches.	Cents	Year.	Inches	Cents.
1842	27	41	1855	40	71	1868	43	43
1843	39	65	1856	50	31	1869	34	30
1844	22	84	1857	47	85	1870	28	16
1845	15	94	1858	20	15	1871	33	62
1846	50	4	1859	27	23	1872	48	34
1847	24	27	1860	26	27	1873	23	50
1848	13	70	1861	16	36	1874	40	30
1849	.	..	1862	28	18	1875	23	61
1850	.	.	1863	28	4	1876	22	13
1851	.		1864	19	43	1877	21	15
1852	.		1865	26	92	1878	47	89
1853	.	40	64	1866	27	14		
1854		33	58	1867	17	67		

2 In 1819 and 1820 a very heavy rainfall was followed by severe frost In January 1820 the whole country exhibited a most melancholy appearance. In a night the finest crops were shrivelled, red, and blackened. Collector's Report, 23rd Nov. 1820; Bom Gov. Rev. Rec. 17 of 1821, 2.

3 Report by Dr. Johnson, dated 29th October 1874.

Chapter I.
Description.
Climate.

Ahmedabad Thermometer Readings, 1838-1848 and 1861-1874.

Years.	Averages.							
	January.		May.		September.		December.	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1838 to 1848	55	82	81	105	77	90	58	81
1861 to 1874	61	80	81	105	74	93	62	82

Generally speaking, the climate of the central portions of the district is more oppressive during the hot season, and at all times less healthy than along the coast-line or in the north, the coast benefiting by its nearness to the sea, and the north of the district by its height above the sea level.

CHAPTER II.

PRODUCTION.[1]

Chapter II.
Production.
Minerals.

THE mound of iron slag on which the small mission house stands would seem to show that at one time iron ore was worked in the neighbourhood of Gogha. Considerable tracts in Viramgám are covered with earth suited to the manufacture of saltpetre. The material for this manufacture in the country round Dholera was one of the advantages urged by the Girásiás when offering their territory to the English in 1801, and Sir Miguel de Souza, who was deputed by the Bombay Government to make local inquiries had made a satisfactory specimen. About the beginning of the century saltpetre was made in large quantities. But soon after the transfer of the district to the English the demand ceased, and, in spite of efforts since made from time to time, has never revived. Details of its preparation will be found under the head 'Manufactures,' where also details of the Khárághoda salt works are given. Coarse soda, *us*, used in soap-making, is found in large quantities in the west of Parántij. From near Gogha, an earth is sent to Bombay, and used for making moulds in iron foundries.

Agates.

The veined agate, *dorádar*, one of the most valued of Cambay stones, is found near Ránpur, in Dhandhuka, under the surface soil in pebbles of various shapes but not more than half a pound in weight. When worked up, it takes a high polish and is of two kinds, showing either a dark ground with white streaks, or dark veins on a light background. A chocolate stone, *rátia*, of brownish earthy base, is found near Ránpur, imbedded a few feet deep in the soil in masses of from one to eight pounds in weight.

Limestone.

Nodular limestone, *kankar*, found in rivers and watercourses, and in extensive beds eight miles south-west of Viramgám at the village of Kankrávádi, and at Barvála in Dhandhuka, is used for mortar and in road-making. Except in Gogha and Bhávnagar, in the south-west, the district is almost entirely without building stone. At or near Gogha are four different kinds, *jurásál* and *suvan*, rough-grained chalky sandstones, and *khijadia*, also found in Piram, and *doláshia*, conglomerates. Of these *doláshia* is most used, but, as in the Gogha town walls, wears badly. These stones cost, by the hundred cubic feet from 4*s*. to 6*s*. (Rs. 2 - Rs. 3) to quarry, and from 16*s*. to £1 (Rs. 8 - Rs. 10) to dress. Six miles from Gogha at Kuda a much better class of sandstone is quarried in flags of from two inches to a foot thick, even surfaced, easily dressed, and lasting. It costs, by the hundred

Building Stone.

---

[1] Materials for the Mineral section have been supplied by Lieutenant C. F. Fuller, R.E, and for the Game animals and Birds sections by the late Major F. H Segrave and by Lieutenant H. D. Olivier, R.E.

Chapter II. Production.

cubic feet, 4*s*. (Rs. 2) to quarry, and 12*s*. (Rs. 6) to dress. Six sorts of building stone are found at Bhávnagar; *akváda*, a conglomerate like the Gogha stone but more lasting, costs 4*s*. (Rs. 2) the 100 cubic feet to quarry, and 16*s*. (Rs. 8) to dress; *gorad* and *vákadia*, both very hard trap used only in rubble masonry cost to quarry 12*s*. (Rs. 6) the 100 cubic feet; *thordi*, a red conglomerate without lime and probably containing iron, can be nicely dressed at a cost of £1 (Rs. 10) the 100 cubic feet; *jithri*, used chiefly for hand corn-grinding mills, is very like granite but contains less quartz. It costs to dress £2 10*s*. (Rs. 25) and to quarry 8*s*. (Rs. 4) the 100 cubic feet; *rájula*, a trap good for building but not found in large blocks, costs to quarry 8*s*. (Rs. 4) and to dress £2 (Rs. 20) the 100 cubic feet. At Sihor a variety of gneiss makes smooth flags from one to six inches thick. But it splits on exposure to the air and is so hard and brittle that it can scarcely be dressed. It costs to quarry 16*s*. (Rs. 8) the 100 cubic feet. In the Chamárdi hills granite, sienite, and gneiss are quarried in large blocks and used chiefly for lintels. They cost to quarry 8*s*. (Rs. 4) the 100 cubic feet, and to dress £3 (Rs. 30); a softer variety is used as road metal. Between Pavi and Bhimnáth a hard variety of limestone is found. This, though not in large blocks, is useful in coarse masonry. It costs to quarry 4*s*. (Rs. 2) and to dress £2 (Rs. 20) the 100 cubic feet.

Forests.

No land has as yet been set apart for forests. Dr. Hové, the Polish traveller, when in Gujarát about ninety years ago (1787), was shown two plantations, one of sandalwood near Dholka, the other of blackwood near Ahmedabad. The sandalwood plantation lay close to the Sábarmati, two miles from the village of Daulat, and was about four and a half miles long and two broad. The seed had a few years before been brought from Mysore, and the trees were still young, none of them more than nine inches in diameter. The seeds were sown at the end of the hot weather in small furrows sixteen feet apart. During the first year the young plants wanted much care, and afterwards, besides the flooding from the river, they were in the dry season watered from wells, the earth turned up near their roots, and their branches pruned. They came to maturity in about ten years and were then cut down and the ground re-sown.[1]

The other plantation near Ahmedabad was of *kálájhád* or blackwood. This was a larger grove, and part of its timber was cut every year, buried in a swamp and after soaking till it was black was sent to Surat and other places on the coast. From Dr. Hové's description the tree was probably *timru*, Diospyros montana, and not the regular blackwood, *sisam*, Dalbergia latifolia.[2]

Trees.

Ahmedabad, with no forests or large groves, is on the whole rather bare of timber. Except Sánand, Daskroi, and Dholka, where mango, *ráyan*, Mimusops indica, *mahuda*, Bassia latifolia, *limbdo*, Melia azadirachta, and other shade trees are found either single or

---

[1] Hové's Tours Bom. Gov. Sel. XVI. 64-65.
[2] Hové's Tours. Bom. Gov. Sel. XVI. 145.

Chapter II.
Production.
Trees.

in small groves, most of the district is poorly wooded. Parántij in the north-east is, to some extent, an exception. Some parts are well stocked with mango and *ráyan* trees, others are covered with brushwood, and the Modása hills have a small supply of inferior teak rafters and bamboos. The produce is entirely consumed in the district, chiefly in the city of Ahmedabad. Many of the Modása wild plants, shrubs, and trees are used as food, in medicine, dyeing, fixing colours, and tanning. Gum, especially from the *kher*, Acacia catechu, and *bábul*, Acacia arabica, is gathered by Bhils and sold either for grain or money, or eaten by the poorer classes. Other kinds of gum, used by goldsmiths and dyers, are exported. The *piplo*, Ficus religiosa, and *bordi*, Zizyphus jujuba, yield a wax much used by goldsmiths for staining ivory red. *Piplo*, *bordi*, and *káhkhra* leaves are eaten by buffaloes. The *mahuda* is very common in the north-east; its berry, boiled with grain and the leaves of a creeper called *dori*, is a very favourite article of food with the Bhils. From *mahuda* seed *dolia* or soap oil is extracted and sent to Kapadvanj and Parántij. Since the extension of the railway to Wadhwán, Ahmedabad mangoes are largely exported to Káthiáwár.

Animals.
Domestic.

The chief domestic animals of the district are oxen, cows, buffaloes, sheep, goats, horses, camels, and asses. Of oxen the 1876-77 returns show a total of 148,399 head. The finest, worth from £15 to £30 (Rs. 150-Rs. 300) the pair, owned by the well-to-do Kanbi and Bohora cultivators of Daskroi, Dholka, and Dhandhuka, are brought from Káthiáwár and Kánkrej in Pálanpur. The cattle of the other parts of the district, especially in Modása, are small and poor. The Gogha oxen, though small and lean, are said, for endurance and power of draught, to equal the larger breed. Of cows the total is returned at 90,414, and of she-buffaloes at 110,089. Cows of the Dhandhuka breed are much prized and are said to yield as much as sixteen pints of milk a day. The other details given in the Kaira Statistical Account apply to Ahmedabad.

Sheep and goats are returned at 74,559, a number more than sufficient for local wants. They are not all the produce of the district. Many are yearly brought by Musalmán traders from Márwár and sent to Bombay. The wool trade to Bombay, also in the hands of Musalmáns, is growing in importance, the total quantity sent by rail having risen from 978 tons in 1868 to 2027 tons in 1877. Other particulars are the same as those given in the Kaira Statistical Account.

Horses returned at 6804 are owned by large landholders, well-to-do cultivators, and townspeople. Considerable numbers of horses of the Káthi, Kábuli, Sindhi, Cutchi, and Arab breeds are reared by Kábuli merchants in Ahmedabad. They find a ready sale in the city of Ahmedabad, among the well-to-do Hindu and Musalmán classes, and among large land-holders in Dholka, Dhandhuka, and Viramgám. As Ahmedabad is one of the best horse-growing districts in the Presidency, Government have made special efforts to improve the local breed. During the nine years ending 1878 from eight to ten stud horses have been kept in the

district, covering yearly on an average about 228 mares.[1] A yearly horse-show has also been held with an average attendance of about 150 animals, the produce of stud horses.

Animals.
Domestic.

Camels, returned at 552, are bred by Rabáris, Rajputs, and Sindhis in Daskroi, Viramgám, and Dhandhuka. Of country camels the male only is used for carrying burdens and the female for milk, the Rabári's staple food. The Ahmedabad camels are less prized than those brought from Márwár. These, especially the very swift Thal camel, which can easily travel forty-five miles a day, are used for riding by Sindhis. The largest number of Márwár camels is found in Dhandhuka and Viramgám. Almost every large landlord or *tálukdár* owns at least two or three. Their prices vary from £2 to £30 (Rs. 20-Rs. 300).

Asses, returned at 10,835, are, as in Kaira, of two kinds, the common and the big white ass from Hálár in Káthiáwár. They are owned by potters, rice-huskers, earth-diggers or Ods, and Rávals. The last are the largest owners in the frontier villages of Dholka and Viramgám, sometimes having as many as 300. They are used in carrying grain, vegetables, and salt. In value they vary from 4*s*. to £2 (Rs. 2 - Rs. 20), but they are difficult to buy as they are all of use to the owner and cost nothing to keep.

Wild.

About a hundred years ago tigers, lions, and other large game were common in Ahmedabad. Tigers (1783) were found in the desolate ground outside[2] of the city walls, and in the Dholka subdivision dense forests near the Sábarmati were the resort of lions and tigers. Forbes in his Oriental Memoirs[3] has preserved Sir Charles Malet's account of a lion hunt in those forests in the year 1780. At Kura, about thirty miles north of Cambay, a place of impenetrable woods, not far from the Sábarmati, the traces of some large animals of the tiger class were found. Failing to beat them out, goats were tied to trees and marksmen set over them. About midnight four large animals came near one of the trees, and two of them trying to carry off the goats were wounded. Next day with a large body of beaters they were tracked through a forest, stretching for miles so thick that the sportsmen had to force their way on hands and knees. The wounded animals when sighted were found to be lions. They made their way into a still closer thicket, and were forced out only by the device of collecting and driving into their lair a herd of buffaloes. When they moved out one of them was killed. The people called it the camel tiger, *untia vágh*, the strongest and fiercest of the race. In colour it was rather yellower than a camel without spots or stripes, 'not high, but powerfully massive with a head and forepart of admirable size and strength.' Oil was extracted and the flesh eaten by the Vághris. A few years later (1787) in the same part of the district tigers were met in the high grass fields,[4] and as late as 1824 the salt flats between Dholka

---

1 The least number was 166 in 1872, the greatest 314 in 1876.
2 Forbes' Or. Mem. III. 105.
3 Forbes' Or. Mem. III. 91.
4 Rové's Tours, Bom. Gov. Sel. XVI. 67.

Chapter II. Production. Animals. *Wild.*

and the Sábarmati, covered with a thick growth of marsh shrubs, were infested with both lions and tigers.[1] About the same time (1825) in Modása and the other eastern districts, especially on the river banks, tigers were numerous, doing much harm to cattle but little to men.[2] Close to Ahmedabad the Sháhi Bág and other old gardens[3] were infested with tigers, and as late as 1840 one was shot in the Queen's Mosque in Mirzápur.[4] As in other parts of Gujarát the increase of population and the spread of tillage have, during the last fifty years, done much to drive off the larger class of game.

Large Game.

The tiger, *vágh,* Felis tigris, is now (1877) almost never found within Ahmedabad limits. In the east of Modása from one to five tigers are generally killed every season. But the tiger's haunts and the actual shooting are generally a few miles over the Mahi Kántha border.[5] The Panther, *dipda,* Felis leopardus, is found in Modása and sometimes in large tracts of grass and brushwood, *bir,* in different parts of the district. Of panthers three each year were killed in 1873 and 1874, and five each year in 1876 and 1877. The Black Bear, *rinchh,* Ursus labiatus, is almost unknown. It is sometimes found in Modása strayed from the Idar forests. The Wolf, *varu,* Canis pallipes, is common in the west of the district on the low-lying salt lands near the Nal. The Hyæna, *taras,* or *tarak,* Hyæna striata, found wherever there are hills and brushwood, is commonest in Gogha, Parántij, and Modása. The Jackal, *siál,* Canis aureus, and the Fox, *lokdi,* Vulpes bengalensis, are common everywhere. The Wild Boar, *dukkar,* Sus indicus, is found in large numbers throughout the district. Except in outlying parts the wild boar is losing his strength and fierceness. In many places four out of five have a whity brown tinge, the result of too close an intimacy with village swine.

Deer.

Of the Deer tribe, the *Sámbar,* Rusa aristotelis, is occasionally found in Modása. The Blue Bull, *nilgai,* Portax pictus, formerly very common, though much reduced in numbers, is still found in the plains throughout the district. The Spotted Deer, *chital,* Axis maculatus, is found only in Modása, and is there very rare. The Antelope, *kaliár,* Antelope bezoartica, is found in large herds throughout the district. The Indian Gazelle, *chinkara,* Gazella bennettii, is common in the western districts and in the rocky uplands of Parántij in the east. The fourhorned Deer, *bekri,* Tetraceros quadricornis, is found only in the thickly wooded Modása ravines.

Small Animals.

Of smaller animals, the Hare, *sasla,* Lepus ruficaudatus, is found everywhere, and the Otter, *pánini biládi,* Lutra vulgaris, in the Sábarmati and in most large sheets of water. The Indian Badger,

---

[1] Bom. Gov. Sel. XI. 4. [2] Bom. Gov. Sel. X. 9. [3] Bom. Gov. Sel. X. 88.
[4] Briggs' Cities of Gujaráshtra, 221.
[5] The returns show four tigers in 1873, two in 1874, and none in 1875, 1876, or 1877.

ádamkhor, Mellivora indica, during the rainy season of 1878 is believed to have done much mischief in Ahmedabad.[1] In the former rains, reports of an evil spirit, *bhut*, were common. But as it was not accused of doing any harm, no inquiry was made. In July 1878 rumours again got abroad, and this time the evil spirit was said to have snatched a sleeping child from a house verandah, and in a very short time to have eaten it all but the head, hands, and feet. Search was made, and there was no doubt that a child had been killed and eaten. Professional trackers, called in by the police, found marks like those of a *chita* or a bear. These they knew to be badger tracks, and traced them to a timber yard. Constables were set to watch the yard, and at night one had a shot but missed. After this, in spite of the efforts of the police, the badgers could not be traced. Meanwhile four children were carried off and eaten, one of them snatched from the mother's arms. In one case a boy thirteen or fourteen years old was attacked. But an alarm was raised and he was rescued. When the crops grew high the badgers left the city. They are known to prowl about slaughter-houses and in grave-yards to dig out dead bodies. But that the children were carried away by badgers has not yet been satisfactorily proved. The measurements of one lately shot at Bhuj, in Cutch, were, length 2½ to three feet, girth eighteen to twenty inches, and height fourteen to fifteen inches. The head, neck, and forequarters were very powerful.

Game Birds.

Of Game Birds, the Large Sand Grouse, Pterocles arenarius, is during the cold season, November-March, found in the extreme west of the district near the Khárághoda salt works. This is a noble bird, measuring from two to three feet across the wings. They are very shy and hard to get near. The Common Sand Grouse, Pterocles exustus, is plentiful throughout the district, especially in the west. In Dhandhuka they may be seen in large numbers in the morning near water. They breed between December and April. The Common Peacock, Pavo cristatus, is found wild eastwards in the untilled tracts in Modása, and to the south on the small island of Piram off Gogha, where they are in great numbers, very wild and shy. Tame peafowl abound in every village.

The Painted Partridge, Francolinus pictus, and the Common Grey Partridge, Ortygornis pondiceriana, are common everywhere. The Painted Partridge lives chiefly in the brushwood and grass-lands or *birs*; the Grey, a most unclean feeder, in hedge-rows and near villages. Both birds breed in the district.

Of Quail, the Jungle Bush Quail, Perdicula cambayensis, is common in bushy, untilled lands, and the Rock Bush Quail, Perdicula asiatica, is found only in Parántij. The Grey Quail, Coturnix communis, is, except in black soil, common all over the district. In some places, except during June, July, and August, they are to be found all the year round. In October they come in large numbers, and stay until the end of March, their movements depending, to

[1] This account is from Major R. Westmacott, late District Superintendent of Police.

Chapter II.
Production.
Animals.
Game Birds.

some extent, on the character of the season. Coming in poor condition, they do not pick up till November. Then they are full size, and till the middle of February plump and hearty. Like the Rain Quail, they live in the fields as long as they can, moving as the crops are cut. When the fields are bare, some find shelter in the hedges, but most take to the brushwood and grass-land, *bir*. The Black-Breasted or Rain Quail, Coturnix coromandelica, remains in the district all the year round, but between May and September is not, as a rule, in good condition. Though large bags have occasionally been made in June, the birds are found in greatest numbers between the middle of July and the end of March. During the rains (July-October) they frequent grass-land, *bir*, and fields of young crops. In October, when the grain is ripening, they move into the millet and pulse fields; later on they are in the rice, wheat, and gram. After all crops are cut, they go back to the grass lands, *birs*, and especially near water are generally to be found in great numbers near the edge among small bushes and grass-tufts. If the grass-lands become bare, they go to the hedges, and, after rain has fallen, many find shelter in the patches of *daruria* that spring up in low moist ground. They breed in considerable numbers in July, August, and September. The Bustard Quail, Turnix taigoor, and the Button Quail, Turnix sykesii, are found all the year round on the same ground as the Grey and Rain Quail.

The Indian Bustard, Eupodotis edwardsii, commonest in Dhandhuka and Gogha, is also found in the country round Ahmedabad. During the rains near Gogha hen birds gather in large flocks.

The Lesser Florican, Sypheotides auritus, appears in the Ahmedabad districts in the beginning of the rains (July). At first they take to open ground and young crops near grass-lands, the hen birds herding together as many as five or six in the same field. They breed in September in the grass-lands. In November the bulk of them leave, but a few stay all the year round.

Of Plovers, the Indian Courier Plover, Cursorius coromandelicus, is found on most open places all the year round. The Grey Plover, Squatarola helvetica, and the Golden Plover, Charadrius fulvus, come to the district during the cold weather, the golden seldom, but the grey in large flocks. The Kentish, Ægialitis cantianus, and the Indian Ringed Plover, Ægialitis philippensis, are found very generally throughout the district. The Red Wattled Lapwing, Lobivanellus goensis, and the Yellow Wattled Lapwing, Sarciophorus bilobus, are common and breed in any open place. The Stone Plover, Œdicnemus crepitans, often called the Bastard Florican, is found near water all the year round. It breeds among bushes on river banks.

Of Cranes, the *sáras*, Grus antigone, is found in all parts of the district, where they spend the whole year, breeding during the rains on the low rice-field banks. During the cold weather as many as fifty of them collect in flocks, often joining with the cold weather cranes. The Common Crane, Grus cinerea, and the Demoiselle Crane, Anthropoides virgo, the latter readily known by its

beautiful breast plumes, come from the north in thousands in November, as soon as the cold weather has really set in. They leave again for the north in March and April. They feed in the morning and evening, spending the day near water.

Of Snipe, the Common Snipe, Gallinago scolopacinus, and the Jack Snipe, Gallinago gallinula, come in the beginning of October, and are found in great numbers until December. Except in the Nal and Bokh, where they stay till the end of March, snipe are not found in any quantity after about the middle of February. The Painted Snipe, Rhynchœa bengalensis, breeds in the district, and is found all the year round.

Of other water birds, the Godwit, Limosa œgocephala; the Curlew, Numenius arquata; the Whimbrel, Numenius phœopus; the Ruff, Philomachus pugnax; the Greenshank, Totanus glottis; the Redshank, Totanus calidris; the Stilt, Himantopus candidus, a resident, and the Avocet, Recurvirostra avocetta, a visitor, though hardly game birds, are sometimes shot for the table.

Of Coots, the Purple Coot, Porphyrio poliocephalus, is found in the north, and the Bald Coot, Fulica atra, over the whole of the district.

The Gigantic Stork or Adjutant, Leptoptilus argala, is common, as also are the Black-necked Stork, Mycteria australis, and the Bittern, Botaurus stellaris.

Of Geese there are four kinds. The common Grey Goose, Anser cinereus; a Green-headed Goose with a red bill, name unknown; the Barred-headed Goose, Anser indicus; and the Black-backed Goose, Sarkidiornis melanonotus. The Black-backed Goose breeds in the district, and is much less wary than the others. At the same time its flesh is very coarse and unfit for food.

Of Ducks there are during the cold season, from November to February, and on the Nal for about six weeks later, the Whistling Teal, Dendrocygna arcuata; the Ruddy Shieldrake or Bráhmani Duck, Casarca rutila; the Shoveller, Spatula clypeata, exceedingly common, probably breeding in the district; the Mallard, Anas boschas, not nearly so common; the Spotted Billed or Grey Duck, Anas pœcilorhyncha, one of the handsomest and found all the year round; the Gadwall, Chaulelasmus streperus; the Pintail, Dafila acuta; the Widgeon, Mareca penelope; the common Teal, Querquedula crecca; the Bluewinged or Garganey Teal, Querquedula circia; the Cotton Teal, Nettapus coromandelianus; the Red-headed Pochard, Aythya ferina; the White-eyed Duck, Aythya nyroca; the Tufted Duck, Fuligula cristata. Beginning to come in October, all these ducks are found in large numbers in November. Formerly during November, December, January, and until the middle of February, duck and snipe used to be plentiful in Parántij, Dholka, Sánand, Daskroi, and part of Viramgám. But for the last few years (1870-1874), owing perhaps to the great quantity of water drawn off for the rice fields, they have become less common.

Fish.

The rivers of the district, the Sábarmati, Meshva, Májham, and some of the smaller streams, larger ponds, and reservoirs are well

Chapter II.
Production.
Animals.
Fish.

stocked with fish. The chief varieties sold as food are the *Marel, Boi, Surmai, Rav,* and *Pran.* The other sorts, much the same as those found in Kaira rivers, are only caught or killed by low caste villagers such as Vághris and Padháriás, and eaten by them exclusively. If caught near cities, they are eaten by Bhois, Bávchás, and the lower order of Musalmáns. Máchhis are the only class of professional fishermen; Bhois, Bávchás, Padháriás, Vághris, and Kolis also catch fish, but they do not live entirely on their earnings as fishermen. The classes that catch fish for amusement are Christians, Musalmáns, Maráthás, Parváris, and Mochis. The last three are chiefly native soldiers. The fish-eating population is in towns, Christians, Pársis, Musalmáns, Jews, Maráthás, Kolis, and Vághris, and in villages Rajputs, Musalmáns, Padháriás, Vághris, Kolis, and Bhils. The nets are of two kinds, the *chota,* eight yards long, and the *kada,* a circular net. Trawling is not practised. Europeans and the upper class of Musalmáns sometimes catch fish with baited hooks and artificial flies and sometimes shoot them with bullets. In Parántij, when flooded after a heavy fall of rain, people swarm in the Bokh wading about and with arrows, tied in harpoon fashion with a long string to their bows, kill great numbers of fish. Fishing by torchlight is common, the Kolis and Vághris killing the fish by spearing or netting, and the Padháriás by beating them with a thick stick. Damming, driving, and poisoning with Coculus indicus are also practised. Except in Ahmedabad, where they may be had salted, fish are almost always sold fresh. Some of the larger towns are provided with fish markets, but in other places they are hawked from house to house. The influence of the *mahájan* or Hindu trader element does much to lessen the destruction of fish. Many rivers, pools, and ponds are strictly preserved.

BENGAL SECRETARIAT LIBRARY

CHAPTER III.

POPULATION.

Chapter III. Population.

According to the 1846 census, the total population of the district was 590,757 souls, or 153·28 to the square mile. Hindus numbered 526,813 or 89·18 per cent, and Musalmáns 63,720 or 10·79 per cent; that is at the rate of eight Hindus to one Musalmán. There were besides nineteen Christians in civil occupation, forty Jews, and 165 Pársis. The 1851 census showed a population of 650,223 souls. The 1872 census showed a startling increase in population, the total returns amounting to no less than 829,637 souls or 215 to the square mile.[1] Of the total number 747,027 or 90·04 per cent were Hindus, 81,373 or 9·81 per cent Musalmáns, 650 Christians, 46 Jews, 482 Pársis, and 59 returned as Others. The following statement shows that in the twenty-six years ending 1872 population advanced 40·44 per cent and houses increased 22·83 per cent.

1846.

1851.

1872.

Ahmedabad Population, 1846 and 1872.

Year.	Population.						Houses.
	Hindus.	Musalmáns.	Pársis.	Christians.	Others.	Total.	
1846	526,813	63,720	165	19	40	590,757	212,464
1872	747,027	81,373	482	650	105	829,637	260,970
Increase per cent...	41·80	27·70	192·12	3321·05	162·5	40·44	22·83

Distribution.

The following tabular statement gives for the year 1872 details of the population of each sub-division of the district according to religion, age, and sex:

1 The increase is probably in great measure due to the incompleteness of the 1846 returns. There was much difficulty in taking the 1846 census. The people generally were suspicious and fearing some form of poll tax gave short returns. The Mehvásis, Áts, and other Parántij classes, refused to allow any scrutiny or even to give an account of the number of their families; the statements were therefore filled up by guesses. The account of the Bhávnagar *tálukdári* villages was obtained with much [illegible]. Collector 207, 30th June 1846.

Chapter III.
Population.
Distribution.

Ahmedabad Population, 1872. Sub-divisional Details.

Sub-division.	Up to 12 years. Males.	Up to 12 years. Females.	From 12 to 30. Males.	From 12 to 30. Females.	Above 30. Males.	Above 30. Females.	Total. Males.	Total. Females.	Grand Total. Persons.
HINDUS.									
Parántij ...	20,127	17,621	18,567	15,353	13,767	13,254	52,461	46,228	98,689
Daskroi ...	24,715	20,518	24,034	19,222	18,881	18,021	67,630	57,761	125,391
Ahmedabad city ...	12,985	10,909	17,289	17,625	16,681	18,486	46,955	47,020	93,975
Viramgám ...	23,025	19,252	22,932	18,703	17,110	16,222	63,067	54,177	117,244
Sánand ...	13,986	11,992	13,353	10,963	8887	9650	36,226	32,605	68,831
Dholka ...	19,222	16,940	20,269	17,221	13,527	14,308	53,018	48,469	101,487
Dhandhuka ...	21,287	18,252	22,028	17,959	17,399	15,017	60,714	51,228	111,942
Gogha ...	5872	4680	5795	5023	4334	3764	16,001	13,467	29,468
Total ...	141,219	120,164	144,267	122,069	110,586	108,722	396,072	350,955	747,027
MUSALMA'NS.									
Parántij ...	1230	1257	1613	1352	1415	1377	4258	3986	8244
Daskroi ...	813	742	951	822	877	742	2641	2306	4947
Ahmedabad city ...	3564	3382	4458	4351	4020	4196	12,042	11,929	23,971
Viramgám ...	1881	1626	2144	1804	1705	1613	5730	5043	10,773
Sánand ...	862	745	807	669	658	654	2327	2068	4395
Dholka ...	2008	1808	2235	2292	1838	1705	6081	5805	11,886
Dhandhuka ...	2318	2047	2398	2098	2134	1857	6850	6002	12,852
Gogha ...	848	806	600	771	557	723	2005	2300	4305
Total ...	13,524	12,413	15,206	14,159	13,204	12,867	41,934	39,439	81,373
CHRISTIANS.									
Parántij ...	...	...	1	...	...	...	1	...	1
Daskroi ...	69	47	44	36	32	24	145	107	252
Ahmedabad city ...	43	30	76	47	71	28	190	105	295
Viramgám ...	...	...	3	3	8	...	11	3	14
Sánand ...	...	...	2	...	...	...	2	...	2
Dholka ...	...	...	...	...	...	...	...	...	...
Dhandhuka ...	...	1	23	4	11	1	34	6	40
Gogha ...	8	11	10	10	5	2	23	23	46
Total ...	120	89	159	100	127	55	406	244	650
PA'RSIS, JEWS, AND OTHERS.									
Parántij ...	...	...	...	...	...	...	...	...	...
Daskroi ...	3	2	5	2	5	3	13	7	20
Ahmedabad city ...	93	85	101	77	97	62	291	224	515
Viramgám ...	...	...	8	...	5	...	13	...	13
Sánand ...	...	...	...	...	1	...	1	...	1
Dholka ...	...	...	...	...	2	...	2	...	2
Dhandhuka ...	1	2	16	2	4	1	21	5	26
Gogha ...	1	1	4	2	1	1	6	4	10
Total...	98	90	134	83	115	67	347	240	587
TOTAL.									
Parántij ...	21,357	18,878	20,181	16,705	15,182	14,631	56,720	50,214	106,934
Daskroi ...	25,600	21,309	25,034	20,082	19,795	18,790	70,429	60,181	130,610
Ahmedabad city ...	16,685	14,406	21,924	22,100	20,869	22,772	59,478	59,278	118,756
Viramgám ...	24,906	20,878	25,087	20,510	18,828	17,835	68,821	59,223	128,044
Sánand ...	14,848	12,737	14,162	11,632	9546	10,304	38,556	34,673	73,229
Dholka ...	21,230	18,748	22,504	19,513	15,367	16,013	59,101	54,274	113,375
Dhandhuka ...	23,606	20,302	24,465	20,063	19,548	16,876	67,619	57,241	124,860
Gogha ...	6729	5498	6409	5806	4897	4490	18,035	15,794	33,829
Total ...	154,961	132,756	159,766	136,411	124,032	121,711	438,759	390,878	829,637

From the above statement it appears that the percentage of ma' on the total population was 52·89 and of females 47·11. H: males numbered 396,0'2, or 53·01 and Hindu females nun

Chapter III. Population.

350,955, or 46·98 per cent of the total Hindu population; Musalmán males numbered 41,934, or 51·53 per cent and Musalmán females 39,439, or 48·46 per cent of the total Musalmán population. Pársi males numbered 280, or 58·09 per cent and Pársi females numbered 202 or 41·90 per cent of the total Pársi population. Christian males numbered 406, or 62·46 per cent and Christian females numbered 244, or 37·54 per cent of the total Christian population.

Health.

The total number of infirm persons was returned at 3761 (males 2204, females 1557) or forty-five per ten thousand of the total population. Of these 240 (males 200, females 40) or three per ten thousand were insane; 321 (males 227, females 94) or four per ten thousand idiots; 671 (males 454, females 217) or eight per ten thousand deaf and dumb; 2287 (males 1148, females 1139) or twenty-eight per ten thousand blind; and 242 (males 175, females 67) or three per ten thousand lepers.

Age.

The following tabular statement gives the number of the members of each religious class of the inhabitants according to sex at different ages, with, at each stage, the percentage on the total population of the same sex and religion. The columns referring to the total population omit religious distinctions but show the difference of sex:

Ahmedabad Population by Age, 1872.

Age.	Hindus.				Musalmans.			
	Males.	Percentage on total male Hindu population.	Females.	Percentage on total female Hindu population.	Males.	Percentage on total male Musalmán population.	Females.	Percentage on total female Musalmán population.
Up to 1 year	12,285	3·10	11,779	3 35	1541	3 67	1599	4 05
Between 1 and 6	63,140	15 94	58,328	16 61	5642	13 45	5516	13 98
„ 6 „ 12	65,794	16 61	50,057	14 26	6341	15·11	5298	13 43
„ 12 „ 20	70,296	17 74	54,362	15 48	7007	16 70	6433	16 31
„ 20 „ 30 . . .	73,971	18 67	67,707	19 29	8199	19 55	7726	19·59
„ 30 „ 40	54,354	13 72	51,430	14 65	6210	14 80	5662	14 35
„ 40 „ 50	32,7[illegible]	8·27	30,838	8·78	3916	9 33	3716	9·42
„ 50 „ 60	16,159	4 07	17,178	4 89	2030	4·84	2116	5 36
Above 60	7291	1·84	9276	2 64	1048	2 49	1373	3 48
Total ...	396,072		350,955		41,934		39,439	

Age.	Christians.				Pa'rsis, Jews, and Others.				Total.			
	Males.	Percentage on total male Christian population.	Females.	Percentage on total female Christian population	Males.	Percentage on total male population.	Females.	Percentage on total female population.	Males.	Percentage on total male population	Females.	Percentage on total female population.
Up to 1 year	14	3·44	6	2 46	18	5 19	10	4 16	13,858	3·15	13,394	3 42
Between 1 and 6 .	48	11 82	54	22·13	38	10 95	36	15·00	68,868	15 69	63,934	16·35
„ 6 „ 12 .	58	14·28	29	11·88	42	12 10	44	18 33	72,235	16 46	55,428	14 18
„ 12 „ 20	66	16 25	39	15 98	65	18 73	39	16 25	77,434	17 64	60,873	15 57
„ 20 „ 30	93	22·90	61	25 00	69	19·88	44	18 33	82,332	18 76	75,538	19 32
„ 30 „ 40 .	69	16 99	32	13 11	50	14 40	32	13 33	60,683	13·83	57,156	14 62
„ 40 „ 50	38	9 36	15	6 14	36	10·37	21	8 75	36,772	8 38	34,590	8 84
„ 50 „ 60	15	3 69	6	2 46	22	6 34	7	2 92	18,226	4·15	19,307	4 93
Above 60	5	1 23	2	0 84	7	2 61	7	2·92	9951	1 90	10,658	2 72
Total	406		244		347		240		438,759		390,878	

Chapter III. Population. Religion.

The Hindu population of the district belongs, according to the 1872 census, to the following sects :

Ahmedabad Hindu Sects, 1872.

Vaishnavs.					Shaivs.	Ascetics, Religious mendicants.	Unsectarian Hindus	Shrávaks.	Total.
Rámánuj.	Vallabháchári.	Kabirpanthi.	Mádhváchári.	Svámináráyan.					
72,092	110,323	50,826	28,007	32,481	65,154	2743	349,554	35,847	747,027

From this statement it would seem, that of the total Hindu population the unsectarian classes numbered 352,297, or 47·15 per cent; the Vaishnavas 293,729, or 39·32 per cent; the Shaivs 65,154, or 8·72 per cent; and the Shrávaks 35,847, or 4·79 per cent. Some details of the Ahmedabad Prárthana Samáj are given in the Ahmedabad city account. The Musalmán population belongs to two sects, Sunni and Shia; the former numbered 69,552 souls, or 85·47 per cent of the total Musalmán population; and the latter, including the Surat or Dáudi trading Bohorás, the Momnás, and a few Khoja families 11,821 souls, or 14·53 per cent. The Pársis are divided into two branches, Shahanshái and Kadmi; the number of the former was 446 or 92·53 per cent, and of the latter 36 or 7·47 per cent. In the total of 650 Christians there are 1 Armenian, 166 Catholics, and 483 Protestants, including 181 Episcopalians, 20 Presbyterians, 4 Wesleyans, and 278 native Christians.

Occupation.

According to occupation, the census returns for 1872 divide the whole population into seven classes :

I.—Employed under Government, or Municipal, or other local authorities numbering in all 7019 souls or 0·84 per cent of the entire population.
II.—Professional persons 6316, or 0·76 per cent.
III.—In service or performing personal offices 12,635 or 1·52 per cent.
IV.—Engaged in agriculture and with animals 140,555, or 16·94 per cent.
V.—Engaged in commerce and trade 20,201, or 2·43 per cent.
VI.—Employed in mechanical arts, manufactures, and engineering operations and engaged in the sale of articles manufactured or otherwise prepared for consumption 165,567, or 19·95 per cent.
VII.—Miscellaneous persons not classed otherwise (*a*) wives 184,458 and children 269,269, in all 453,727, or 54·69 per cent, and (*b*) miscellaneous persons 23,617, or 2·84 per cent; total 477,344, or 57·53 per cent.

The general chapter on the population of Gujarát includes such information as is available regarding the origin and customs of the Ahmedabad people. The following details show the strength of the different castes and races as far as it was ascertained by the census of 1872.

Hindus. *Priests.*

Under Bráhmans came, exclusive of sub-divisions, fifty-four divisions with a strength of 47,053 souls (males 23,849, females 23,204) or 6·30 per cent of the total Hindu population. Except the Nágars, of whom many are in good condition, the majority of Bráhmans live on alms. In point of number the Audich Bráhmans (19,330) hold the first place. They act as priests and cooks and cultivate land, but many live on alms. Of 4491 Nágars of six divisions, the Vadnagrás who act as clerks, money-lenders and

Chapter III. Population. Hindus.

merchants, are well off and hold a high place both on account of their intelligence and wealth. The other Nágars are chiefly priests, cooks, servants, and cultivators. The Modh (4531); the Meváda 3224; the Shrimáli (1530); the Ráyakvál (1143) and the Válam (1129) are cultivators, priests, and beggars. A few Deccan Bráhmans, descendants of some who during the eighteenth century came with the Maráthás, are permanently settled in the district and continue to hold respectable positions. Differing from them in dress, manners, customs and language, they hold aloof from Gujarát Bráhmans and continue to keep up close social and religious relations with their caste fellows in the Deccan and in Baroda.

Writers.

Under the head of Writers came three classes, Brahmá-Kshatris (536); Káyasths (139) and Parbhus (71) with a total strength of 746 souls (males 410, females 336) or 0·09 per cent of the total Hindu population. As a class the Brahma-Kshatris are rich. They own land and house property. Many of them in Government service hold offices of trust and responsibility; others are pleaders and money-lenders. The numbers shown separately against Káyasths and Parbhus represent chiefly the Káyasth Parbhus of the Konkan districts who came to Gujarát after its conquest by the Maráthás (1723-1757) and have, some of them, permanently settled in Ahmedabad.

Traders.

Under the head of Mercantile Trading and Shop-keeping classes, came 31,559 Meshri or Bráhmanic Vániás belonging to twenty-two divisions; 29,272 Gujaráti Shrávaks or Jain Vániás of five divisions, 6186 Márvádi Shrávaks of two divisions and 4147 Bhátiás giving a total strength of 71,164 souls (males 36,632, females 34,532) or 9·52 per cent of the total Hindu population. Unlike other parts of Gujarát the Shrávak Vániás or Jain merchants are superior in wealth to the Meshri Vániás or Bráhmanic traders. They exercise great influence in trade matters, one of their number holding the high post of Nagar Seth, or head of the trading community. The wealthiest members of both classes employ their capital locally, supplying the funds by which petty village usurers and dealers carry on their trade. Those who do not possess sufficient capital to subsist solely by money-lending, borrow at moderate rates of interest from men of wealth and deal in cloth, grain, sugar, molasses, and timber. The poorest of all either sell these articles in small retail shops, or move from place to place hawking common spices, drugs, and cloth. Besides engaging in trade, the Shrávak and Meshri Vániás are employed as clerks, and in Government service, some of them especially among the Shrávaks holding places of trust and consequence. The Márvádi Shrávaks so powerful south of the Tápti hold no place of importance in Ahmedabad. Bhátiás, strangers from Cutch, are spreading over the rural parts of the district as village shop-keepers.

Husbandmen.

Under the head of Husbandmen came six classes with a total strength of 393,776 souls (males 208,952, females 184,824) or 52·71 per cent of the whole Hindu population. Of these 123,697 (males 65,075, females 58,622) were Kanbis; 49,363 (males 26,395, females 23,268) Rajputs; 6904 (males 3462, females 3442) Sathvárás; 3242

Chapter III.
Population.
Hindus.
Husbandmen.

(males 1668, females 1574) Káchhiás; 2217 (males 1187, females 1030) Mális, and 208,053 (males 111,359, females 96,694) Kolis. The Kanbis who number 123,697, or 16·55 per cent of the entire population are an important and very valuable class. They are of three divisions; two large classes, Leva and Kadva, most strict in their tenderness for life, and the A'njnás a small body eating animal food and in other respects like Rajputs. Though many are skilled weavers and artisans and some have risen to high positions in Government service or acquired wealth in trade, the majority are engaged in agriculture and form the bulk of the peasant proprietors or yeomanry of the district. They are excellent cultivators and have many virtues. They are sober, peaceable,[1] industrious, and except on occasions like marriages, thrifty, good sons, husbands, and fathers. Gross vice is uncommon among them and crime rare. They are also more intelligent and better educated than the rest of the agricultural population. Female infanticide, owing to the ruinous expenses attached to marriage, having been found prevalent among the Kanbis, the provisions of Act VIII. of 1870 were applied to the Kadva and Leva Kanbis. Subsequently the Kadva Kanbis were declared wholly exempt from the provisions of the Act, and in the case of the Leva Kanbis the restrictions were reduced to a simple registration of births and deaths. The Rajputs, though they have given up their turbulent practices, still to some extent retain the look and bearing of soldiers. They are divided into two classes, *tálukdárs* or large proprietors, and common peasants. The former lead a life of idleness on the rent of their lands, and are much given to the use of opium. Nothing in the dress of a peasant Rajput distinguishes him from a Kanbi, though as a husbandman he is far below him in skill and less careful and hardworking. Their women are, unlike those of the proprietor class, not confined to their houses but help their husbands in the field work. The number of Rajputs includes 3813 Narodás who are said to be the descendants of the slaves of Sidh Ráj's house (1094-1143). Their names are the same as Rajput names, and in courage, dress, and food, they do not differ from the Rajputs. They are cultivators and marry only among themselves. The Sathvárás and Káchhiás grow and sell vegetables, flowers and fruits. Some of them are also artisans and weavers.

The Kolis are the largest tribe or caste in the district with a total strength of 208,053 or 27·85 per cent of the entire Hindu population. Besides three small divisions, Bária, Márvádi, and Agria, Ahmedabad Kolis belong to two chief classes, *Talabda*, or home Kolis, numbering 146,517 souls settled in all parts of the district, and *Chuvália* or men of forty-four villages, 57,750 strong, belonging to a

---

[1] Though so quiet as a rule the Kanbis have in a few cases in troubled times risen to positions of power. One family of Kadva Kanbis from Chámpáner established themselves at Viramgám and gained power enough to resist for several years (1732-1736) the Marátha attacks on their town. After their defeat by Dámáji Gáikwár, they still as chiefs of Pátri kept up an armed force and acted with independence. Bom. Gov. Sel. X. 54.

Chapter III. Population.

Hindus.

Husbandmen.

tract of country in the north-east of Viramgám. Under the Maráthás, except in the centre of the district where they would seem to have been orderly cultivators, the Kolis were in a chronic state of revolt. Treated as outcastes and known by the reproachful name of *mehvás* 'or the faithless,' they lived in separate bands or states with the manners and habits of a distinct people.[1] In the central parts of the district the home, *Talabda*, Kolis were in 1820 as at present quiet and easily managed, willing to till to the best of their knowledge and means.[2] Along the eastern frontier in disturbed times they were useful as a guard against the wilder mountain Kolis and Bhils.[3] At present some of them are village watchmen, trackers, and labourers, but most are husbandmen, well-to-do, and little inferior in skill to Kanbis. Under the Maráthás the Chuvália Kolis were a body of organized plunderers. Led by chiefs, *thákardás*, partly of Rajput descent, they lived in villages protected by almost impassable thorn hedges and levied contributions from the districts round, planning, if refused, regular night attacks and dividing the booty according to recognized rules. Almost entirely uncontrolled by the Maráthás, at the beginning of British rule the Chuvália Kolis more than once, in 1819 and 1825, rose in revolt. On their second rising their hedges and other fortifications were removed and their power as an organized body of plunderers was crushed. Among them are still men of unruly and criminal habits, but as a class they have for years settled as cultivators and labourers.

Craftsmen.

Of Manufacturers there were four classes, with a strength of 13,792 souls (males 7282, females 6510) or 1·84 per cent of the total Hindu population. Of these 3797 (males 2071, females 1726) were Khatris, weavers of silk and cotton and makers of gold and silver thread; 3962 (males 2091, females 1871) Ghánchis, oil-pressers, vegetable sellers, weavers, and labourers; 5365 (males 2751, females 2614) Bhávsárs, calicoprinters; 668 (males 369, females 299) Chhipás, calenders, the last two somewhat depressed in condition owing to the competition of European goods.

Of Artisans, whose condition is on the whole good, there were eight classes, with a total strength of 56,965 souls, (males 29,818, females 27,147) or 7·62 per cent of the total Hindu population. Of these 6715 (males 3601, females 3114) were Sonis, gold and silversmiths; 11,118 (males 5661, females 5457) Suthárs, carpenters; 1189 (males 572, females 617) Kansárás, coppersmiths; 1741 (males 899, females 842) Kadiás, bricklayers; 85 (males 36, females 49) Saláts, masons; 9650 (males 5049, females 4601) Luhárs, blacksmiths; 19,751 (males 10,622, females 9129) Kumbhárs, potters; and 6716 (males 3378, females 3338) Darjis, tailors.

Bards.

Under the head of Bards, Songsters, and Actors came two classes with a strength of 5255 souls or 0·70 per cent of the total Hindu population. Of these 5225 (males 2809, females 2416)

---

1 Bom. Gov. Sel. XXXIX. 29. For an explanation of the word *mehvás* see above, page 81.

2 Bom. Gov. Sel. X. 96.

3 Bom. Gov. Sel. X. 121.

Chapter III. Population. Hindus.

were Bháts, bards, and Chárans, genealogists; and 30 (males 16, females 14) Ghandhraps, songsters. The Bháts or Bárots, the Rajputs' bards and genealogists, have lost much of the importance that attached to them from the sanctity of their persons. Many of them, whose chance of earning a livelihood as sureties or guides has ceased, now engage in ordinary occupations, tilling land and lending money. In 1827, the chief capitalists of Viramgám were Bárots, of whom one was said to be worth £70,000 (Rs. 7,00,000). The Bárots were supposed to possess in all about £140,000 or fourteen *lákhs* of rupees; they were sureties or *manotidárs* and invested their money in loans upon pledges as pawn brokers.[1]

Servants.

Of Personal Servants there were three classes with a strength of 13,127 souls or 1·75 per cent of the total Hindu population. Of these 12,008 (males 6582, females 5426) were Hajáms, barbers; 1043 (males 492, females 551) Dhobhis, washermen; and 76 (males 37, females 39) Bhistis, water-drawers. Though not so well off as artisans, personal servants are not scrimped for food or clothes.

Under the names of Khavás, Golás or Lundás there is in large Rajput households a small class of hereditary servants. These are all the descendants of slaves. But among them the Khavás are held superior as either they or their forefathers have been treated by their chief with special trust. Some of the Khavás released by their masters from service have settled as cultivators. Of the rest the men act as body-servants and attendants on the chief and the women on the ladies of the family. Well fed and well treated they seldom run away. The women known as *Vadhárans* or *Chhokris* are of easy virtue and hardly any married. On the marriage of a chief's daughter a certain number of male and female servants forms part of the lady's dowry.[2]

Shepherds.

Of Herdsmen and Shepherds there were three classes with a strength of 28,848 souls or 3·86 per cent of the total Hindu population. Of these 17,386 (males 9620, females 7766) were Bharváds; 10,792 (males 5743, females 5049) Rabáris; and 670 (males 416, females 254) Ahirs. The Bharváds wander from place to place living in the meanest huts and with no stock more valuable than sheep and goats. The Rabáris live in towns and villages in well built houses. They own cows and buffaloes as well as sheep and goats; some of them are employed in the carrying trade to districts inaccessible to cart traffic.[3]

Fishers.

Of Fishers and Sailors there were two classes with a strength of 3786 souls or 0·50 per cent of the whole Hindu population. Of these 3211 (males 1712, females 1499) were Bhois, who besides their occupation as fishers, cultivate land and act as labourers and

---

1 Bom. Gov. Sel. X. 73. 2 Rás Mála, II. 235.

3 Viramgám was originally peopled by a race of shepherds or Ahirs, whose sole work was looking after flocks and herds. They are said to have built the fine and large ponds that are so important a feature in the country. There were still (1826) cowherds and graziers in every village. Bom. Gov. Sel. X. 71.

domestic servants; and 575 (males 486, females 89) Khárvás, who are chiefly tile turners.[1]

Hindus.

Miscellaneous.

Of Labourers and Miscellaneous Workers there were fourteen classes with a strength of 32,155 souls (males 17,023, females 15,132) or 4·30 per cent of the whole Hindu population. Of these 1701 (males 876, females 825) were Golás, ricepounders; 1092 (males 569, females 523) Maráthás, servants and labourers; 13,162 (males 6956, females 6206) Vághris, fowlers, labourers, and beggars; 8286 (males 4503, females 3783) Rávaliás or Rávals, carriers of grain, vegetable sellers and beggars; some of them chiefly those inhabiting the Dholka sub-division and the villages bordering on the Nal had formerly a bad name as salt smugglers and beggars; 77 (males 38, females 39) Bhádbhunjás, grain parchers; 198 (males 90, females 108) Kámaliás, makers of blankets, *kámli*; 696 (males 370, females 326) Bávchás and Pomlás, apparently of Deccan origin, labourers; 950 (males 536, females 414) Odiás, diggers; 203 (males 117, females 86) Purabiás, messengers; 103 (males 72, females 31) Kaláls, liquor distillers; 49 (males 34, females 15) Vanjárás, carriers of goods; 316 (males 164, females 152) Lodhás, carriers of goods; 3500 (males 1666, females 1834) Márvádis, immigrants from Márwár during famines; 1610 (males 870, females 740) Bajániás, acrobats; and 212 (males 162, females 50) miscellaneous. The Padháriás of the villages bordering on the Nal of whom no separate details are given in the census reports are said to be Kolis who lost caste from eating dead animals. They cut grass and dig up roots and like Vághris catch birds and fish. They generally live on the roots of the grass, *bir*, which they pound into flour. Except the Golás, Maráthás, Bhádbhunjás, Purabiás, Kaláls, Vanjárás and Lodhás whose earnings suffice for their ordinary expenses, these classes are poor, ill clad, and without credit.

Unsettled Classes.

Of Unsettled Classes there were 1441 souls (males 749, females 692) or 0·19 per cent of the total Hindu population. Of these 1429 (males 744, females 685) were Bhils, and 12 (males 5, females 7) Chodhrás. The census seems to have brought the unsettled population of Parántij under the head Kolis. They were formerly called Bhils. At the time of the 1826 survey they are described as originally degraded Rajputs and others who were mere robbers and outlaws and who, growing in strength during the disturbance of the eighteenth century, formed themselves into a separate caste.[2]

Leather Workers.

Of Leather Workers there were two classes with a total strength of 17,881 souls (males 9679, females 8202), or 2·39 per cent of the total Hindu population. Of these 5486 (males 2946, females 2540) were Mochis, shoemakers, in good condition; and 12,395 (males 6733, females 5662) were Khálpás, tanners, one of the depressed or unclean classes, in poor condition.

Depressed Classes.

Besides the Khálpás there were five Depressed castes with a total strength of 54,427 souls (males 29,477, females 24,950) or 7·28 per

1 The famous Gogha láscars are Musalmáns, see below, p. 42.
2 Bom. Gov. Sel. X. 10.

Chapter III. Population. Hindus.

cent of the total Hindu population. Of these 2333 (males 1213, females 1120) were Garudás or Dhed priests; 39,341 (males 21,272, females 18,069) Dheds, weavers and carriers of dead animals; 12,705 (males 6968, females 5737) Bhangiás, scavengers; and 48 (males 24, females 24) Parváris, apparently of Deccan origin. Some of the Dheds and Bhangiás are said to be in miserable condition.

Beggars.

Devotees and religious mendicants of various names, Brahmacháris, Vairágis, Gosáis, Sádhus, and Jogis numbered 6611 (males 4288, females 2323) or 0·88 per cent of the entire Hindu population. In 1825 the eastern districts of Ahmedabad were infested with wandering Gosáis in gangs of twenty or thirty. They visited every village and besides money, extorted food for themselves and their horses and dogs.[1]

Musalmáns.

Among the British districts of Gujarát Ahmedabad has the largest proportion of Musalmán inhabitants with 81,373 souls or 9·80 per cent of the whole population. Of the whole number 23,971 were, in 1872, returned as settled in the city of Ahmedabad, 12,852 in the sub-division of Dhandhuka, 11,886 in Dholka, 10,773 in Viramgám, 8244 in Parántij, 4947 in Daskroi, 4395 in Sánand, and 4305 in Gogha. Exclusive of women 27,920 and children 24,549, in all 52,469 or 81·52 per cent of the whole, the male adult Musalmán population (28,904) were in 1872 employed as follows: in Government or other public service 1632; in professions 932; in personal service 1212; in agriculture 6750; in trade 1714; in mechanical arts and manufactures 13,662; and in miscellaneous callings 3002. In addition to the four main divisions, Syeds, Shaikhs, Patháns, and Moghals, numbering altogether 25,091 souls or more than one-third of the whole, there are several classes almost all of them descendants of converted Hindus, cultivators, traders, oil-pressers, weavers, and bricklayers, who so far keep up old caste distinctions that they seldom marry except people of their own class. Of these the chief are 13,128 Bohora traders and cultivators; 5696 Maleks, land owners and cultivators; 5518 Sipáhis, village servants; 4791 Ghánchis, oil-pressers; 3381 Pinjárás, cotton-cleaners; 2860 Momnás, weavers and cultivators; 2261 Khojás, and 1875 Memans, traders and shop-keepers. There is besides a considerable miscellaneous population of cultivators, calico-printers and dyers, barbers, butchers, and several other classes.

The Bohorás are of two classes, Shia and Sunni. The former, followers of the Mulla Sáheb of Surat, are the more important of the two. They are divided into two sects Dáudi 2732, and Sulemáni 1329. As a rule they live in the city or in towns. Many of them are successful traders and men of capital. The Sunni Bohorás are husbandmen, cartmen, and carriers. They are an active and thrifty class. The Maleks, or lords, are the descendants of converted Rajputs. As a class they are tall and fair with good features. Their home language is Gujaráti. The men dress like the Káthis with big turbans, tight jackets, trousers, and waist cloths. The

[1] Bom. Gov. Sel. X, 42.

women dress like Hindus. They are land owners and husbandmen. The women spin but do not work in the field. Though clean, tidy, and honest, they are idle, thriftless and given to opium. Their women do not appear in public. They are poor, many of them in debt. The Sipáhis or soldiers would seem to be a mixed class, partly the descendants of immigrants, partly of Rajput converts, as their surnames Chohán, Ráthod, and Parmár show. They speak Gujaráti. Intermarrying with other Musalmáns, they have no peculiar appearance, and vary in their fashion of wearing the hair and beard. Except in Káthiáwár where they dress like Hindus, both men and women wear Musalmán clothes. They are cultivators, labourers, and in Government service as soldiers, constables, and messengers. The women spin, and the wives of poor cultivators work in the fields. The Ghánchis or oil-pressers are said to be the descendants of converted Hindus of the Pinjára and Ghánchi classes. Like the Musalmán Pinjáras they call themselves Mansuris or followers of Mansur.[1] The men and women dress like Hindus and speak Gujaráti. They marry only among themselves and the Pinjárás. Though some of them are rich, none have risen to any high position. The Pinjárás, except in their occupation of cotton cleaning, differ very little from the Ghánchis. The Momnás, properly Momins or believers, are Shiás in religion. Converted by the Bokhári Syeds at various times, this sect is generally known as Imám Sháhis or followers of Imám Sháh of Pirána (1449). They observe circumcision, bury the dead, and perform marriage both according to Musalmán and Hindu rites. They are chiefly weavers of silk and cotton cloth. The Kasbátis, or owners of *kasbás* or towns, are some of them descended from Baluch or Pathán mercenaries, but most are of Rajput origin. Besides Kasbátis they call themselves Maleks, and may be considered to form part of that class. They are holders of grants of land. Occasionally they marry Hindu wives, Kolis and sometimes Rajputs by caste. At such marriages the bride's friends call in a Bráhman, but in other cases the ceremony is Musalmán. Most are sunk in debt and weakened in body by the constant use of opium. The Khojás, or honourable converts, followers of H. H. Aga Khán and almost all of them of Hindu descent, are wholesale and retail traders, shrewd, hard-working, and thrifty. As a class they are well-to-do. The Memans are of two divisions, Cutchi and Hálái. The Cutchi Memans were Lohánás and the Hálái, from Hálár in Káthiáwár, were partly Lohánás and partly Káchhiás. These men dealers in groceries, cloth,

---

[1] This Mansur flourished near the close of the fourteenth century. The Futuhat-i-Firoz Sháhi (Elliot, IV. 379) has the following reference to him. 'A person who was one of the pupils of Ain Máhru, had set himself up as a *shaikh* in Gujarát, and having got together a body of disciples used to say '*Ana-l-Hakk*,' I am God. He commanded his disciples that when he used these words they were to say; 'Thou art,' thou art.' He further said; 'I am the king who dies not,' and he wrote a book in which he inserted the words of his profession. He was put in chains and brought before me (Firoz Sháh, 1351-1388). The charge being proved I condemned him to punishment and his book I ordered to be burnt.' According to the Gujarát story the saint's head after it was cut off kept on saying '*Ana-l-Hakk*.'

Chapter III.
Population.

Musalmáns.

and miscellaneous articles, are Sunnis of the Hanafi school. They live in towns and are generally well-to-do. The Hálái Memans, cultivators in the west of Ahmedabad, dress like Rajputs with a large loose turban, a sleeved-waistcoat, *bandi*, and waist cloth, *dhoti*; while the Cutchi Memans dress in Musalmán fashion, with a coat and trousers and a head dress in shape like the Moghal turban. The Hálái Memans have an hereditary head, *mukhi*, who lives at Dhoráji in Káthiáwár. Considering themselves a higher class the Cutchis refuse to marry with the Háláis. Of the special class of Musalmán sailors known as Gogha Láscars some details are given in the account of that town.

Pársis.

Of the total Pársi population of 482 souls, 448 were in 1872 returned as settled in the city of Ahmedabad, 13 in Viramgám, 11 in Dhandhuka, 8 in Gogha, and 2 in Dholka. Exclusive of 160 women and 107 children, the adult male population (215) were employed as follows: in Government or other public service 49; in professions 2; in personal service 33; in trade 88; in mechanical arts and manufactures 25; and in miscellaneous callings 18.

Christians.

The total of 650 Christians is exclusive of the troops in the Ahmedabad cantonment. The native Christians are almost all local converts made by missionaries of the Irish Presbyterian Church who [illegible] settlements, [illegible] at Wallacepur near Gogha. The Irish Presbyterian Church began mission operations in the city and neighbourhood of Ahmedabad in 1861. The immediate cause was the growth of the Christian population and the scarcity of land in Borsad. A suitable waste tract in the village lands of Sháhávádi on the Dholka road, about five miles south-west of Ahmedabad, was secured, and nine families numbering in all forty souls settled there. In consequence of this arrangement a missionary was stationed in Ahmedabad, and in the course of a few years, owing chiefly to the success of the educational department of the work, the services of a second were needed and secured. In the city of Ahmedabad are (1878) five schools under the care of resident missionaries and supported by mission funds. Of these schools, four, two for boys and two for girls, are vernacular; the fifth, an English school, has for the last ten years ranked as a high school teaching up to the Bombay University entrance standard. The schools are inspected by Government educational officers, and according to examination results receive grants-in-aid: these in 1878 amounted to the sum of £224 (Rs. 2240). On the roll of the vernacular schools there were, according to the last published report (1877), 356 pupils; and on the roll of the English school 261. Of the pupils not more than a dozen are Christians. Except a few Pársis and still fewer Musalmáns, they are all Hindus. In 1877 the native Christian community in and round Ahmedabad numbered 316 souls. Of these 258 have been baptised, and fifty-eight, though like the others they keep Sunday and attend the church services, have not yet been formally received as members of the church. Except a few boys who attend the city schools and the evangelists in mission service, all the Christians live in Sháhávádi. In the village a Government day-school is attended by nearly all the children, and with the help of

Sháhávádi.

several of the people the missionary pastor also conducts a Sunday school. The church services are well attended, and the conduct of the people is on the whole satisfactory. Since 1861 the number of families has grown from nine to sixty-four. By birth all are Hindus, including persons belonging to the Vánia, Rajput, Kanbi, Koli, Lohána, Bhil, and Talávia castes. Most of them live by farming, and as cultivators are fairly successful. Advantage was taken of the light soil of the village to induce the people to use an English plough. So well have the English ploughs worked that during the last two or three years Mr. Gillespie, the resident missionary, has been asked for and has supplied ploughs to people of the neighbouring villages. Among the converts the feeling of caste is as far as possible repressed. People originally of different castes freely intermarry, hardly any regard being shown to their former social status. Marriage with the heathen is forbidden, and offences against Christian law and order are punished as laid down in the Irish Presbyterian church book of discipline. Except those savouring of caste, their social customs have undergone scarcely any change. They dress in the same fashion, eat the same food, and in most cases are called by the same names. Nearly all can read, write, and cipher, and the women and girls are very expert in plain and fancy needle work.[1]

Wallacepur.

The Gogha Christian mission, begun by the Rev. James McKee in 1844, is part of the Káthiáwár and Gujarát mission establishment, started and supported by the Presbyterian Church in Ireland. Including three mission agents the Gogha Christian community at present (1878) numbers eighty-nine souls[2] of whom twenty-three are communicants. Besides these there are several persons without families. The missionary lives at Gogha. The Gogha district has not been fruitful of converts. But in 1871 a number of Christian colonists came from Gujarát, and settled on a tract of land near the village of Kureda, about eleven miles south-west of Gogha. This settlement is the hamlet of Wallacepur, so called in memory of the Rev. James Wallace, long a missionary at Gogha. The hamlet of eight dwellings has a neat church with a good bell, a missionaries-house, a rest-house, a public well, and a cattle pond. The houses, most of them whitewashed within and without, have each two rooms and a walled-in yard with out-houses for fodder and cattle. Care is taken to keep the village clean, and the villagers are fined if they tie cattle in the street or in their verandahs, if they let dirt gather near the houses, or wash clothes at the village well. A row of trees runs along the centre of the present street, and other rows mark future street-lines. The village was laid out and most of the houses were built by the Rev. William Beatty, for ten years (1867-1877) missionary at Gogha. Additions have been made by the Rev. G. T. Rea, who since 1877 has been in charge of the mission. Some of the people of Wallacepur used to be weavers; now all are farmers. A son of

---

1 Contributed by the Rev. R. Gillespie, Ahmedabad.

2 Of these, six families live in the town of Gogha, nine families at a settlement called Wallacepur, two families in Bhávnagar, and one in the village of Unchadi.

Chapter III. Population. Christians. *Wallacepur.*

one of them is in the service of the Bhávnagar state as *faujdár* or chief constable. Another man, formerly a teacher, is in the same service as a road-overseer, while a third Christian acts as house steward to His Highness the Bhávnagar Chief. Each family in Wallacepur holds about thirty acres of land, part of it tilled and part under grass. The land and houses are rented from the mission, the mission being the Government tenant. Each family has a well. A light English iron plough and an English harrow have been introduced with good effect. Though in breaking up fresh soil four are needed, in ordinary tilled land the plough can be drawn by two bullocks. Each family owns one and some own two pairs of working bullocks, and several buffaloes and cows. The farm tools are also their own. They raise a good stock of poultry, which, with the eggs, they sell and use. Their food is the ordinary local grains and vegetables, and occasionally potatoes, tea, coffee, mutton and venison. Both men and women; some of whom were orphan girls brought up in the Surat Mission Orphanage, can nearly all read and write, and are daily instructed by the daughter of one of the settlers, who was educated in Ireland. They are also familiar with the Bible and Christian hymns. The people are from various castes, from the Bráhman to the Dhed. They keep Sunday as a day of rest, most of them going twice to church services led by a native evangelist. They have also a social house-to-house religious meeting every evening. Caste feasts, customs, and distinctions, as well as excessive expenditure on festive occasions are strictly prohibited, as is the use of liquor, opium, and all other intoxicating or enervating preparations. Church censure or excommunication is the penalty for the breach of this rule. Tobacco smoking is allowed but discouraged. Though not blameless, the conduct of the community is better than that of ordinary natives of similar rank. No breach of the Penal Code has ever occurred in the village, though provocation from non-Christian neighbours has often been given. In several cases, people of different castes have intermarried, Bráhmans with Kolis, Bráhmans with Vániás, and Kolis with Dheds. Widow marriage is encouraged and has frequently taken place. Child marriage is unknown. Both bride and bridegroom must be old enough to choose for themselves and to understand the duties of husband and wife. Of Native Christian workers, three are evangelists and five school-teachers. The rest of the school-teachers are Hindus, Bráhmans by caste. Seven schools, five for boys and two for girls, are at present at work, with an aggregate roll of 241, 192 of them boys and 49 girls. Three of the boys' schools are attended by good caste Hindus and Musalmáns, and the remaining two by Dhed boys. One of the girls' schools is attended by upper class Hindus and the other by lower. A few girls also attend one of the Dhed schools. In two of the best schools Christian boys of Dhed parentage are pupils without objection from teachers or scholars. These upper schools, both for boys and girls, teach according to the Government standards, and receive yearly grants-in-aid. There is no other girls' school in Gogha. Christian books are taught in all the mission schools and Christian hymns are learned by heart. Until last year, when from the hard times attendance fell off,

there were schools for Bhangiás or sweepers, and many of this class have learned to read and write. Bhangia boys are as a rule stupid. But Dhed boys, once in the way of learning are little, if at all, less gifted than higher class boys. Foot races and other games are sometimes got up for the school boys and are much enjoyed.[1]

Villages.

In this district there is one village or town to about every four square miles of land, each village containing an average of 964 inhabitants, and about 303 houses. With the exception of the people of thirteen towns, numbering 236,918 souls or 28·55 per cent of the entire inhabitants, the population of the Ahmedabad district, according to the 1872 census returns, lived in 847 villages, with an average of 689 souls per village. Of the whole number of towns and villages, 165 had less than 200 inhabitants; 293 from 200 to 500; 228 from 500 to 1000; 125 from 1000 to 2000; 27 from 2000 to 3000; 9 from 3000 to 5000; 9 from 5000 to 10,000; and 4 more than 10,000.

The villages, particularly those in which the bulk of the residents are Kanbis, contain many substantial tiled houses two stories high; and these people appear to possess considerable property in household utensils and ornaments. The same may be said, in a somewhat less degree, of the villages inhabited by a mixed population of Rajputs and Kanbis. The Koli villages are however poor, their houses mean and uncomfortable.

The following description of a Gujarát village is taken from an account[2] by Mr. W. G. Pedder, of the Bombay Civil Service: 'All lands whatever in Gujarát, as throughout the inhabited parts of India, are divided into portions varying in area from two hundred or three hundred to several thousand acres, each of which is appropriated to a single village or town. 'Parish,' in the ordinary acceptation of the term, denotes accurately enough one of these territorial divisions. The whole population of the parish, a practice which doubtless dates from old times of insecurity, live together in the village itself, which is generally situated near the centre of the area. There are sometimes hamlets, subsidiary to large villages, but isolated dwellings are never met with, except in one or two of the southern districts of Gujarát, where the farm servants occasionally live in huts upon the farm itself. The village, containing from 100 or less to 2000 or 3000 inhabitants, is always built beside a tank or large embanked pond, shaded by noble trees among which is the temple of the local god. On one side of the tank and in front of the village is an open space where the cattle assemble to be watered in the morning and evening, and here is usually a deep chambered well, with a long flight of stone steps leading to the water. Some such wells, built by the charity of rich Hindus, are beautifully ornamented with sculpture, and have cost as much as £10,000. Here also at nightfall, on earthen seats round the stem

1 The account of the Gogha Christian settlement has been compiled from materials supplied by the Rev. Geo. T. Rea, Gogha.
2 Indian Economist, August 1869, p. 10.

Chapter III. Population. Villages.

of an aged tree, the village elders assemble to smoke the *huka* and talk over their simple topics. The village itself is occasionally surrounded by an earthen wall, but more commonly by a thick cactus hedge, and even this defence is now often wanting. At the entrance are the huts of the sweepers, one of whose duties it is to guide travellers; and on the outskirts of the village live, each in their separate quarters, the different classes of low-caste labourers. Their huts are sometimes wretched enough, yet often, and increasingly so of late years, they inhabit decent cottages of one story, built of unbaked brick and tile.'

'In the middle of the village live the yeomen, the owners and cultivators of the lands. Their houses with walls of brick and tiled roofs are usually built two or even three stories high, round court-yards opening with a gate to the street, in which the cattle are shut up for the night. Sometimes one house with its offices is large enough to form such a court-yard, but more often three or more houses have one yard in common. They front upon the court, and the doors, windows, and balconies are generally ornamented with the delicate wood carving for which Gujarát is famous. The sides or ends towards the street present a blank wall, often covered with stucco, and adorned with frescoes, barbarous indeed in design, but brilliantly coloured, and not wanting in spirit. A house of this sort, well supplied with the simple furniture and utensils of Hindu housekeeping, is of a class above the hovel of an Irish cottier, or even the cottage of an English agricultural labourer.'

Dwellings.

As regards the number of houses, there was in 1872 a total of 260,970 or on an average 67·71 houses to the square mile, showing, compared with 212,464 in 1846, an increase of 22·83 per cent. Of the total number 71,517 houses lodging 239,527 persons or 28·87 per cent of the entire population, at the rate of 3·35 souls to each house, were buildings with walls of fire-baked bricks and roofs of tile. The remaining 189,453 houses accommodating 590,110 persons or 71·13 per cent with a population per house of 3·11 souls, included all buildings covered with thatch or leaves, or whose outer walls were of mud or sun-dried brick.

Communities.

In the Land Administration chapter some account is given of the constitution of Government and proprietary, *tálukdári*, villages. Of the village staff those specially considered to be Government servants are the headman, *patel* or *mukhi*; the village accountant, *taláti*; the messenger, *haváldár*; the watchman, *chokivála*; the tracker, *pagi*; and the sweepers and police of the Dhed, Bhangia, and Shenvo castes. Except the village accountant, *taláti*, and the messenger, *haváldár*, who receive only money, village servants are paid either in cash or in land or in both. The watchmen and trackers, who are generally armed with swords, receive from some of the villagers doles of grain or money, and in return hold themselves responsible for property stolen from their houses. They get forty pounds (one *man*) a house from the cultivators; 2*s*. (Re. 1) in cash from Vániás, and a smaller sum from the poorer non-agricultural classes. If stolen property is not recovered, the village council assesses the compensation to be paid, keeping in view the probable amount of

loss and the watchman's means. The sum awarded is, if necessary, recovered when the watchman receives his yearly dues. But most watchmen are men of substance, tilling land on their own account, and able to satisfy the demand out of their own pockets, or by borrowing. The servants useful to the village community and falling under the name *vasváyás*, or classes originally invited by the community to minister to their wants, are the carpenter, *suthár*; the blacksmith, *luhár*; the potter, *kumbhár*; the barber, *hajám*; the tailor, *darji*; the shoemaker, and tanner, *mochi* and *chámadia*. These men are paid by the villagers in grain and cash. The carpenter, the blacksmith, the potter, the barber, and in some villages the tanner also enjoy Government land on payment of one-quarter to one-half of the full rent. Each landholder employs only one tanner who supplies him with leather and to whom he, in return, gives one-half the skins of his dead sheep and bullocks, and as they are too hard to make anything but ropes, the whole of his buffaloes' skins. Another right enjoyed and insisted on by the tanner is that of, during sowing time, every day taking to the field and bringing home the seed drill; and for this, at harvest according to the cultivator's means and position, he is given from 40 to 200 pounds (1 - 5 *mans*) of grain.

The Bráhman village priest, *gor*, also sometimes the village schoolmaster, enjoys land rentfree or at a quitrent and receives money and grain presents from the villagers. Formerly the preliminaries of all marriages were left in his hands. The village shopkeeper, generally a Vánia, though not one of the community, is thought a necessary person in most villages. Bhaváyás, or strolling players, are attached to most villages and in some cases hold land though they seldom live in one place. The Jogi or Rával gets no fixed allowance either from the State or from the village, but is considered necessary to a complete community, and if not resident, is summoned from elsewhere when occasion calls. He lives by begging and sometimes by selling vegetables. His special duty is to sound the gong to call the people together, though proclamation is generally made by the Bhangia by word of mouth. He is also in some villages supposed to forward public papers, a duty commonly entrusted to the messenger or watchman.[1]

Movements of the people.

Many Ahmedábad merchants and traders live in Bombay, but unlike some of the Surat traders they do not settle there returning to Ahmedabad when any family ceremony has to be performed. Of the Bráhmans, some are employed as cooks in Bombay, and many during the fair season visit Surat and Bombay, returning with their earnings. Neither cooks nor beggars take their families with them. Artisans seldom leave the district, but of personal servants, a large number of barbers, leaving their families behind them, are found in Bombay and Surat, where they remain for more than a year at a time. Whole families of Vághris and Rávaliás go as far as Bombay

1 Most of the other details of the different classes of village servants given in the Broach Statistical Account, Bombay Gazetteer, II. 381-386, apply to Ahmedabad.

Chapter III. Population.

Movements of the people.

and maintain themselves there by begging. In the busy season (October-May) Bombay and Káthiáwár traders and merchants are found at Dholera. Some account of the movements of the labouring classes is given under the head Wages (page 80). Besides what is there stated, the chief movement, one that dates from the 1869 famine is the influx of labourers from Márwár. Bringing their families with them they are employed on railway works, road-making, and pond-digging, and still more as reapers in the great western wheat lands, and as unskilled workers during the cotton season in Ahmedabad, Viramgám, Dholera, and other centres of trade. About one-half return before the rains to till their fields. The rest have settled at Ahmedabad, Viramgám, Mándal and elsewhere, some of them working as carpenters, smiths, wood-splitters, and at other crafts. As their caste is hard to tell, both employers of labour and other workmen look on these Márvádis with suspicion. A short time ago all the hands in one of the Ahmedabad spinning mills struck work on finding out that one of the Márvádi workmen was a Dhed who had passed himself off as of higher caste.

CHAPTER IV.

AGRICULTURE.

AGRICULTURE supports 371,417 persons or 44·76 per cent of the entire population.[1]

Soil.

The two chief kinds of soil are the black, *káli*, and the light, *gorát*. In many parts of the district both kinds occur within the limits of the same village. But on the whole, the black soil is found chiefly towards the west, and the light soil in the east. The black soil belongs to the *khokhar* variety with a subsoil of nodular limestone, *kankar*, and gravel. It is shallow and much impregnated with alkali, *khár*.[2] The light soils are well supplied with springs, which, after the early harvest has been reaped, enable the cultivators at very little cost to have cold weather, *rabi*, and even hot weather, *hari*, crops. With the help of water and manure, the light soil is very fertile. Though during the dry weather, especially where subject to traffic, it wears into a loose fine sand, after rain has fallen it again becomes tolerably compact and hard. The low, *bára*, lands of Dhandhuka and Dholka are, even when the soil is deep, too moist for cotton. But when the rain waters subside, wheat of a very good quality is widely raised year after year. The Sánand and Dholka rice beds are, owing to bad water-storage, inferior to those of Daskroi. Two other varieties of soil though less generally distributed require notice; an alluvial deposit of the Sábarmati river, the most fertile soil in the district, easily irrigated, holding water at the depth of a few feet below the surface, and a red stony soil, like that of the Deccan, favourable for Indian corn, in the north-east sub-division of Parántij. This red stony soil also occurs in the hilly parts of Ránpur and Gogha and accumulates in the valleys in a rich loam that yields good crops of sugarcane.

---

[1] This total (371,417) is made up of the following items: (1) Adult males engaged in agriculture as per census of 1872, 131,627; (2) wives of ditto, calculated on the basis of the proportion the total adult female population of the district bears to the total male population, 119,219; (3) children of 1 and 2 calculated on a similar basis, 120,571; total, 371,417. This calculation is necessary because the census returns including many of the women under the head miscellaneous show a total of only 8613 under the special head adult agricultural females.

[2] The early district officers complained much of the large area of salt, *khár*, land that yielded nothing but weeds and grass. Good lands, they said, sometimes suddenly turned salt and after remaining useless for one or two years again became sweet. Land was believed to become salt from too much rain. In low-lying places the surface water lodged and in other parts after a very heavy rainfall the water from the deep saltbearing strata soaked up to the surface, Bom. Gov. Litho. Papers, 149, 2, and Bom. Gov. Sel. XI. 7.

Chapter IV. Agriculture.

Arable Area.

Exclusive of lands belonging to other territory situated within its limits, the district contains, according to the return furnished by the survey superintendent, 2,434,762 acres. Of these, 248,635 acres or 10·21 per cent are alienated, paying only a quitrent to Government; 1,400,416 acres or 57·51 per cent are held by large land-owners, *tálukdárs* and *mehvási* chiefs; and 177,856 acres or 7·30 per cent are unarable waste. Of 607,855 acres, the total Government arable area, 509,623 acres or 83·84 per cent were in 1877-78 held for cultivation. Of this, 9168 or 1·79 per cent were garden land; 33,326 or 6·53 per cent, rice land; and 467,129 or 91·66 per cent, dry-crop land. Of the rice land, 19,927 acres are irrigated, and 13,399 acres unirrigated.

Irrigation.

As most of its rivers flow along deep narrow channels, the district is not suited for direct river irrigation. At the same time there are many spots along the course of the Sábarmati, Khári, Bhádhar, and Utávli, where by means of a frame on the river banks water is raised in bags. Well water is also used to a considerable extent. But the irrigation from ponds and reservoirs is almost confined to the early part of the cold season, November and December, to bring the rice crops to maturity. Well water is generally found at a depth of from thirty to sixty feet. But to raise it is costly, and there is considerable risk amounting in places almost to a certainty that the water will in time become salt. The chief watered crops are rice, wheat, sugarcane, and garden produce. In 1877-78 of the total cultivated area, 39,000 acres or 4·46 per cent were watered, and of the watered land 29,457 acres were under rice.

The irrigation branch of the Public Works Department,[1] since it began in northern Gujarát in 1867-68, has carried out some not unimportant works and has also by gauging the flow of the various larger streams, and by surveys and levels in Dholka, Sánand, Daskroi, and Parántij, collected a valuable mass of data for future guidance. The only work of any size is the Chandola lake. This as well as the Kánkariya lake near Ahmedabad is fed from a stream that rises on the west of the Bokh. It seems originally to have fallen into the Khári near the village of Gámri and to have been turned towards these two reservoirs by a dam near Kámod. To supplement this feeder, a cut from the river Khári at Ráipur was in 1868-69 begun as a famine relief work for Márvádi immigrants. As soon as the famine pressure passed off the work was stopped, and as the volume of water in the Khári is at present barely sufficient to supply the demand on its own banks it will probably remain in abeyance. To increase the flow of water in the Khári as well as for direct irrigation, the Háthmati canal was designed. It was opened in June 1873. Its supply is drawn from the river Háthmati near the ruined fort of Ahmednagar in the Idar state, about forty miles east of Ahmedabad. At this point the water is raised by a rubble masonry weir 22 feet high and 1000 feet long, founded partly on sandstone and partly on inferior limestone. At the site of the

1 The irrigation details are supplied by J. D. Ferguson, C.E, and Mr. Ely, C.S.

Chapter IV. Agriculture. Irrigation.

canal's head-works, the river has a drainage area of 524 square miles. The canal, completely bridged and regulated, is twenty miles long and commands an area of 34,068 acres on the left bank of the river. Its first three miles are in Idar and then to its tail where it joins the Khári river it crosses Parántij. When fully supplied this canal will carry 190 cubic feet per second, for the first ten miles, diminishing gradually to 60 cubic feet per second at the tail, the mean width being 18 and 18½ feet and the mean depth 5 and 3 feet respectively. Its actual cost, inclusive of establishment charges, was at the end of 1876-77, £45,629 (Rs. 4,56,290); the area it is designed eventually to irrigate once in a three years' rotation is upwards of 34,000 acres. Much inquiry and consideration have been given to the secondary object in view of which the Háthmati canal was undertaken, that is, to the enlargement of the Khári stream. The masonry works on the upper part of the canal have been made of extra width to admit water intended for that river, and it has been suggested that this extra flow might be led off through the Bhogáva which passes close to the fifth mile, thus freeing the remaining part of the canal for its primary purpose. Sites for storage works have also been proposed on the Háthmati and on the Khári itself. The project most in favour at present is the construction of a dam with sluice gates at the south end of the Bokh and the conversion thereby of that large natural depression into a storage reservoir. In other parts of the district professional attention has chiefly been directed to the Sábarmati of which careful surveys have been made, and the result has shaped itself into a scheme for constructing a weir near Ahmedabad with the double purpose of watering a large stretch of country and bringing to the city a supply of much needed water. The cost of this work including a canal through the Daskroi and Dholka sub-divisions is estimated at £171,288 (Rs. 17,12,880) and the area to be irrigated by a triennial rotation, at 79,500 acres. Many difficulties beset the undertaking, chief of which is the absence in the bed of the river of any solid foundation for the weir. Speaking generally, this district is not favourable for large irrigation works. Except in the lands of native chiefs to the north and east, there are no sites suited for storage reservoirs. Owing to the looseness of the soil the loss by soakage is so great that even within a limited area water will only go about half as far as in heavy land. Finally the rivers flow, as a rule, in deep narrow channels with sandy beds, and to bring water several miles from them to command lower land involves serious loss before an acre is watered. To secure his rice-crop it is not unusual for a cultivator who has no well, to hollow near the field a small pond in which a supply of rain water gathers and, if the later rains fail, is carried into the rice-beds by a channel or more often by a water-lift, *jhilu*.

Tillage.

As in other parts of Gujarát there are in Ahmedabad two field seasons, the early, *kharif*, lasting from July to November and the late, *rabi*, from November to March. There is also in watered lands a hot weather, *hari*, crop sown in March and April and reaped in May and June.

Chapter IV. Agriculture.

Tillage.

Fourteen English ploughs have been distributed in the district. In the light soils they have been found to answer well, going deeper than the native plough and more thoroughly covering manure and weeds. A light grubber for rooting out grass and a broad sowing machine are tools said to be much wanted. The use of manure especially in light soils is admitted, and so great is the demand, that within the last twenty years the price of farm-yard refuse has doubled and in some places risen even fourfold. In the east of the district, where the soil is deep and improvable rather than naturally rich, the supply of manure is sadly below the demand, and its use is almost entirely confined to fields close round the villages. Two causes, the want of any fuel except dried cowdung cakes, and, by the reduction of the pasture area, the great spread of tillage combine to limit the supply of manure. In a few backward Koli parts, farm-yard refuse still sells for not more than 3*d.* to 4½*d.* (2-3 *annas*) the cart load, but the average price is 2*s.* (Re. 1) and where there is much land under tobacco or other exhausting crops it rises as high as 3*s.* (Rs. 1½). The refuse of castor oil seeds is bought from the presser at the rate of 120 to 160 pounds for 2*s.* (Re. 1) and used for rice and sugarcane. Pond mud believed to keep off white ants is used for setting sugarcane cuttings. In the rich blacksoil of the west, farm-yard refuse is said to 'burn' the crops, but pond mud is occasionally used.

Plough.

The area an average pair of bullocks can plough is in rice, *kyárda*, land about four acres; in light, *gorát*, land about nine acres; and in black, *káli*, cotton or wheat soil abont twenty acres. Rice land wants the most working, for the soil is not only heavy to plough but has to be often ploughed; the light soil though easily worked wants several ploughings and being apt to grow weeds has to be often grubbed and loosened; the black soil though heavy wants little tillage and is free from weeds. The following statement prepared by the Survey Superintendent shows that the average size of a plough of land varies from $7\frac{3}{40}$ acres in Parántij to $24\frac{6}{40}$ in Gogha, and that the average size of a farm varies from $7\frac{31}{40}$ in Daskroi to 30 in Dhandhuka.

Ahmedabad Holdings and Size of a 'Plough' of Land, 1878.

Size.	Parántij.	Viram-gám.	Daskroi.	Sánand.	Dholka.	Dhan-dhuka.	Gogha.
Average acreage of farms	$9\frac{11}{40}$	$23\frac{6}{40}$	$7\frac{31}{40}$	$12\frac{13}{40}$	$1[illegible]\frac{9}{40}$	30	$24\frac{6}{40}$
Average acreage to a plough... ...	$7\frac{3}{40}$	$9\frac{22}{40}$	$12\frac{25}{40}$	$9\frac{27}{40}$	$10\frac{28}{40}$	$17\frac{4}{40}$	$24\frac{6}{40}$

Holdings.

In 1876-77 the total number of holdings in Government villages including alienated lands, was 59,685 with an average area of 14½ acres. Of the whole number 22,511 were holdings of not more than five acres; 14,997, of not more than ten acres; 12,427, of not more than twenty acres; 7690, of not more than fifty acres; 1649, of not

more than 100 acres; 250, of not more than 200 acres; 50, of not more than 300 acres; 13, of not more than 400 acres; 12, of not more than 500 acres; 21, of not more than 750 acres; 11, of not more than 1000 acres; 23, of not more than 1500 acres; 12, of not more than 2000 acres; and 19, above 2000 acres.

Chapter IV. Agriculture Holdings.

Stock.

During the thirty years ending 1877, the number of ploughs has risen from 59,630 to 63,707 or 6·83 per cent, and of carts from 18,401 to 22,012 or 19·62 per cent. Live stock, on the other hand, has, from the spread of tillage and the narrowing of the pasture area, fallen from 505,285 to 466,229 or 7·72 per cent.

Ahmedabad Stock, 1846 and 1877.

Year.	Ploughs	Carts.	Live Stock.							
			Oxen.	Cows.	Buffaloes.	Horses.	Sheep and Goats.	Camels.	Asses.	Total.
1846	59,630	18,401	156,254	138,958	119,101	5638	75,094	296	9944	505,285
1877	63,707	22,012	149,192	90,090	131,720	6645	77,195	552	10,835	466,229
Increase per cent in 1877.	6·83	19·62	...	...	10·59	17 85	2·79	86·48	8·96	...
Decrease per cent in 1877.	...	...	4·52	35·16	...	...	...	...	...	7·72

Crops.

Cultivation details are, out of the whole number of 830 villages, available for 452 Government and 291 proprietary villages. In them, of 1,218,024 acres of occupied land, 344,720 acres or 28·3 per cent were in 1877-78 fallow or under grass. Of the 873,304 [1] acres under tillage, grain crops occupied 657,440 or 75·2 per cent, of which 230,307 were under wheat, *ghau*, Triticum æstivum; 215,438 under *juvár*, Sorghum vulgare; 158,183 under *bájri*, Penicillaria spicata; 16,198 under rice, *dángar*, Oryza sativa; 13,537 under barley, *jav*, Hordeum hexastichon; 9823 under *kodra*, Paspalum scrobiculatum; 8053 under *bávto*, Panicum frumentaceum; 2048 under *vari*, Panicum miliaceum; and 3850 under miscellaneous cereals comprising maize, *makái*, Zea mays; *rági*, Eleusine corocana; and *chenna*, another kind of Panicum miliaceum. Pulses occupied 48,722 acres or 5·5 per cent, of which 21,720 acres were under *math*, Phaseolus aconitifolius; 12,064 under gram, *chana*, Cicer arietinum; 9114 under *mag*, Phaseolus radiatus; 2165 under *guvár*, Cyamopsis psoralioides; 1676 under *adad*, Phaseolus mungo; 1613 under *kulthi*, Dolichos uniflorus; and 370 under miscellaneous pulses comprising *tuver*, Cajanus indicus; and *vál*, Dolichos lablab. Oilseeds occupied 18,214 acres or 2·08 per cent, of which 10,734 were under gingelly oilseed, *tal*, Sesamum indicum; 539 under rapeseed, *sarsav*, Brassica napus; 363 under linseed, *alshi*, Linum usitatissimum; 7 under mustard, *rái*, Sinapis racemosa; and 6571 under other oilseeds, of which the details are not available.

1 Of 873,304 acres 14,047 acres were twice cropped.

Chapter IV. Agriculture.

Crops.

Fibres occupied 142,252 acres or 16·2 per cent, of which 142,151 acres were under cotton, *kapás*, Gossypium herbaceum; and 101 under *san*, Crotalaria juncea. Miscellaneous crops occupied 6676 acres or 0·7 per cent, of which 2498 acres were under sugarcane, *serdi*, Saccharum officinarum; 702 under safflower, *kusumbo*, Carthamus tinctorius; 329 under tobacco, *tambáku*, Nicotiana tabacum; 209 under indigo, *gali*, Indigofera tinctoria; and 5438 under miscellaneous vegetables and fruits.

Wheat.

Among crops Wheat, chiefly from Dholka, Dhandhuka, and Viramgám, holds the first place with, in 1877-78, 230,307 acres or 26·37 per cent of the whole tillage area. There are two chief varieties, *chásia* grown in Dholka, Dhandhuka, Viramgám, Sánand, and Gogha, and *vádina* or *vájia* grown in Daskroi and Parántij. *Chásia* is of two kinds, *kátha* red, and *dáudkháni* white. Of these only the red is sown in Dhandhuka as the salt subsoil is believed to be unfavourable to the white. *Chásia* is grown in light black soil without watering. Eighty-four pounds of seed are used to the acre. Except when it takes the place of a failed cotton crop, the same field in one year yields nothing but wheat. Land intended for wheat is left fallow and ploughed four times before the seed is sown. The first ploughing is in May or June before the rains set in. The crop is sown at the end of October or the beginning of November and reaped in April. The average acre yield of *chásia* is estimated at 258 pounds. *Vádina* or *vájia* is sown in watered light sandy soil at the rate of 160 pounds of seed to the acre. It sometimes follows rice or millet, but in such cases the outturn is small. Except that three ploughings are enough, it is grown in the same way as *chásia*. It is sown in December and reaped in April. The average acre yield is estimated at 600 pounds. *Chásia* suffers from frost, grasshoppers, *kápdi*, and other enemies. *Vádina* or *vájia* is liable to mildew, known as *geru*, *gervar*, or *jern*. This disease attacks watered wheat only. It gives the young plants a reddish tinge, the colour growing more and more marked as the disease spreads. There is no known remedy for it. White or *dáudkháni* wheat commands so high a price for home consumption that it does not pay shippers to export it. The Dholka, *vájia*, wheat is said to be suited to the export market and to be similar to the lower class red, *pissi*, of the Central Provinces.

Indian Millet.

Indian millet, *juvár*, Sorghum vulgare, of which there are no fewer than ten varieties, holds the second place, with 215,438 acres or 24·66 per cent of the whole tillage area. It is the staple grain of the district and the people's chief article of food. It is sown in the beginning of July and reaped early in October. With it are grown pulses which taking longer to ripen remain in the field a month after the millet crop has been reaped. Millet straw is highly valued as fodder. To meet the daily consumption of the cultivator's cattle, much of it is cut green, and goes far to make up for the want of grass at all times scanty in light soils.

Millet.

Millet, *bájri*, Penicillaria spicata, of two kinds, a smaller and finer and a larger and coarser, holds the third place, with 158,183 acres or 18·11 per cent of the whole tillage area. Next to *juvár* it forms the chief food of the people and like it is sown along with pulse.

Cotton, *kapás*, Gossypium herbaceum, holds the fourth place, with 142,151 acres or 16·27 per cent of the whole tillage area. Cotton is grown in the Dholka, Dhandhuka, and Viramgám sub-divisions. Of the three varieties of soil, mixed, *besar*, is the best, black, *káli*, the next, and light, *gorádu*, the least suited to the growth of cotton. No foreign cotton is grown. The local varieties are in the Viramgám sub-division, *jatvária*; in Dholka, *bhália* and *vágadia*; in Dhandhuka, *lália* and *vágadia*; and in small quantities near the city of Ahmedabad, *jária*. Except the *jária* these are all yearly varieties. The *jária* is allowed to grow for four seasons. At the end of the first before the rains set in the branches are cut close to the root. The second year's crop is the best; after that it falls off, the seed growing larger and the staple weaker and shorter. Except in a few villages where it is sown year after year, cotton is grown only every second year, in black soil in turn with wheat or barley and in light soils in turn with millet. *Jária* is grown along with millet; the other kinds are sown by themselves. Manure is used in light but not in mixed soils. Even in light soils it improves the crop only after a good rainfall. In July when the land is ready, the seed cleaned by rubbing with earth and ashes in a corded frame is, at the rate of ten pounds the acre, sown from a drill plough with three or four tubes or feeders. The watering of cotton, common a hundred years ago (December 1787)[1] but apparently in 1850 out of use[2] has again come into practice in Viramgám, Dholka, and Dhandhuka. Watering much increases the outturn, but is open to the objection that it makes the crop apter to take harm from frost. When full grown the plants stand from 3½ to five feet high. Fields sown in July flower in September and October and pod in December. In light soil, before the time of flowering cloudy weather or even slight rain, though it somewhat keeps back the picking, does good. Much rain increases the size of the seed and lessens the outturn; and after pods are formed and when near bursting rain harms the crop. Beginning in early years in January but oftener in February, the picking season lasts till the end of March and sometimes till April. Except the Dhandhuka *vágadia* or hard-shelled cotton, which must be picked with the pods, the other kinds ought in picking to be separated from the pod. But this is nowhere the practice and in consequence the shell, broken and mixed with the wool, greatly lowers its value. The one-year plant yields two and sometimes three pickings, the three-year plant always yields three. The picked cotton is gathered in heaps and at the end of the day carried to the yard near the cultivator's house. Here the pods are broken and the wool drawn out by the hand and, to loosen and free it from leaf, it is laid on a rope framework or on the ground and beaten with sticks. According to a return prepared by the Collector in 1850 the average maximum acre produce of clean cotton varied from twenty-three pounds in Gogha to 108 pounds in Viramgám.[3] The shells serve as

---

1 Dr. Hové. Bom. Gov. Sel. XVI. 83. 2 East India Papers (Cotton).
3 Parliamentary Papers, East India Cotton, Part III. 122.

Chapter IV. Agriculture.

Crops. *Cotton.*

fuel and as cattle fodder. Of the further processes of ginning and pressing some account is given below under the head of Trade.

The adulteration of cotton has not been less common in Ahmedabad than in other districts. In 1850 a system of universal fraud prevailed among the petty traders. The efforts made by Government to punish and repress this evil have to some extent been successful. But many dishonest practices are still common. These consist either of pressing with the cotton wool, cotton seed, clay, sand, or stones, or of mixing together good and bad sorts of cotton. For fraudulent mixing two sorts of poor cotton are used. Of these one called *barki* grown in Márwár, is brought to the Ahmedabad markets and mixed with *lália*; the other called *saklia* grown in western Ahmedabad near the Nal lake, is sent to Káthiáwár to be mixed with the more valuable kinds.

From time to time during the last fifty years attempts have been made to introduce the culture of foreign cotton. These efforts have, as the following details show, met with very little success. In February 1833 a Mr. Martin fixed on two spots, one near Dhandhuka and the other near Ránpur, as suited for the growth of Egyptian and Pernambuco cotton.[1] Of the result of these experiments no details are available, and nothing more would seem to have been done till in January 1852 a Mr. Price was appointed to superintend experiments in growing foreign cotton and introducing the American sawgin.[2] He was allowed to make presents of New Orleans seed to any land owners willing to take it; to buy the produce at five per cent above the market price of local cotton, and to promise that if the crop failed no rent would be levied. He was also allowed to take up land and plant it with foreign cotton in Dholka and Dhandhuka. In all 128 acres were sown with New Orleans seed. During the rainy season the crop suffered from rain and many fields entirely failed. Only about 2000 pounds of cotton or a yield of about 15½ pounds to the acre were forwarded to Bombay. In 1853, 402 acres were planted with New Orleans cotton. The season was somewhat unfavourable. The local cotton suffered slightly and the foreign severely, failing altogether in Dholka. The whole produce was estimated at 19 cwt. or a yield of 5¼ pounds to the acre. It was shipped to England and left a loss of nearly fifty per cent. In 1854 about fifty acres were sown with foreign seed. Part of this was a complete failure, and the whole yield was only about 200 pounds of clean cotton or an acre average of 4½ pounds. This failure was supposed to be partly due to bad management, and a Mr. Daly was appointed in Mr. Price's place. In 1855, 376 acres were sown and yielded 2887 pounds or about 7½ pounds to the acre. Heavy rain is mentioned as one cause of the small outturn. In 1856, 57 acres yielded about 494 pounds or about 8¾ pounds to the acre. In 1857

---

1 Royle, 420.

2 The details about the cotton experiments from 1852 to 1860 are compiled from Mr. Cassel's work "Cotton in the Bombay Presidency," and the details for the years subsequent to 1860 are compiled from the annual reports and from a paper supplied by Mr. Turner, Cotton Inspector.

Chapter IV. Agriculture.

Crops.

Cotton.

no foreign cotton was sown. In 1858, 440 acres were sown, but the crop was completely destroyed by rain. In 1859 no foreign seed was sown, but some experiments were made as to the effect of water and manure on the local, *vágadia*, cotton.[1] In 1860 about seventy acres, sown with foreign cotton, yielded 2716 pounds or thirty-eight pounds the acre. This, though a less complete failure than former attempts, was not encouraging and from 1860 the appointment of a special officer to carry on cotton experiments ceased. Between 1861 and 1865 no further experiments were made. In 1866 Egyptian cotton seeds were distributed. A sample of the produce was found by the Bombay Chamber of Commerce to be in colour about the same as average, long and regular in staple, and moderately fine and strong. It classed as fully good fair. In 1868, 120 acres in Dhandhuka were sown with Egyptian seed, but only forty acres yielded any outturn. In 1869 seventy-six acres in Viramgám were sown partly with local, partly with foreign seed. Of the local kinds the yield and quality of Sáila and Wadhwán were almost equal to Viramgám, and Broach was found to do well. Of the foreign kinds Egyptian and Hinganghát prospered in light soils. Egyptian was grown in about eight acres of light soil. The field was ploughed with the native plough but somewhat deeper than usual. Part of the field was manured. The use of the village sweepings was found to increase the growth and strength of the plant but not to add to the outturn. The average acre yield was 100 pounds of clean cotton. A small part of the field was twice watered but with no perceptible effect on its outturn. Thinning was also tried but was found of little use as the plants did not throw out side shoots. Hinganghát also did well, making rapid progress and yielding a fair crop. Compared with the local varieties, both Egyptian and Hinganghát are open to the objection that instead of yielding two or three general pickings they go on ripening slowly for four or five months and during the whole of that time want care and labour.

Rice.

Rice, *dángar*, Oryza sativa, holds the fifth place with 16,198 acres or 1·85 per cent of the whole tillage area.[2] The best rice villages are in Daskroi and Sánand. Rice is grown in black soil in banked and watered fields. The young plants, sown about the middle of June in richly manured nurseries, are moved into the fields in July and August. For about two months until the ear begins to show, much water is wanted, and if the rainfall is scanty, supplies must be drawn from wells and ponds. In some parts of the district the rice lands are *akásia* or rain watered. They are banked and levelled

---

1 The results of these experiments were: ¼ acre of red soil manured and partly irrigated by percolation produced fifty pounds of clean cotton, cost of cultivation was £1 5*s.*, and the sale proceeds of the cotton and seed 16*s.* or a loss of 9*s.*; ¼ acre of red soil manured and partly irrigated by percolation produced forty pounds of clean cotton, cost of cultivation 11*s.* and the sale proceeds of the cotton and seed 15*s.* or a profit of 4*s.*; ¼ acre of white soil unirrigated and unmanured produced thirty pounds of clean cotton, cost of cultivation was 6*s.* and the sale proceeds of the cotton and seeds 10*s.* or a profit of 4*s.*; ¼ acre of black soil unirrigated and unmanured produced thirty-five pounds of clean cotton, cost of cultivation 6*s.*, and the sale proceeds of the cotton and seed 12*s.*, or a profit of 6*s.*

2 The rice area is usually much larger than this; in 1874 it was 41,090 acres.

Chapter IV. Agriculture.

Crops.

but the yield is very precarious. The chief sorts of rice are *pankháli, kamod, eláichi, sutarsál, vánklo,* and *sáthi.* Of these the *pankháli* and *kamod* are, on account of their superior quality, much prized by the richer classes, and form an article of export. *Sathi* is a coarse rice.

Oil Seeds.

Of Oil seeds, *tal,* Sesamum indicum, is grown throughout the district, linseed in Dholka, and rapeseed in Viramgám. These seeds are exported in considerable quantities to Bombay and other places.

Indigo.

Indigo with 209 acres is grown only in Daskroi. In the seventeenth century, indigo was one of the chief agricultural products of the district. Even late in the eighteenth century it was much grown.[1] In 1820 after a long period of great dullness a rise in price revived its importance. But of late years, nominally from the destruction of insect life caused in its preparation, but probably chiefly from the low price it fetches, its cultivation has almost entirely ceased.

Sugarcane.

Sugarcane with 2498 acres is grown chiefly in Daskroi, Dholka, Dhandhuka, and Sánand. It is usually found in detached fields. There are two sorts of sugarcane, *káli,* black or red cane, and *dholi* white. Like Kaira the Ahmedabad district draws much of its sugar supply from Surat.

Máliát.

In Dholka and Daskroi many garden, *máliát,* crops are grown, including besides the condiments used in native cookery, plantains, ginger, garlic, chillies, and limes.

Cultivators.

Among husbandmen Kanbis hold the first place. Hardworking, intelligent, and with minute hereditary knowledge, they till with great skill and success, knowing well the value of manure and of crop changes. It is chiefly to its Kanbis that parts of the district owe their name for rich garden produce. Next to Kanbis come Káchhiás and Sathvárás, market gardeners seldom found except close to large towns, but in skill and perseverance little inferior to Kanbis. Next to them come the Bráhmans with less skill and knowledge but hardworking and careful. After the Bráhmans rank the Talabda Kolis, willing and steady but dull and unskilled; then the Musalmáns and Rajputs not wanting in intelligence or skill but idle and careless, taking what they can from the land, but not helping it either with manure or rest. Below them the Chuvália Kolis, though settled as husbandmen, are still without knowledge or skill, and lowest of all are the *Mehvási* Kolis and Bhils, unsettled tribes, who in cleared forest patches, *valrás,* grow coarse crops with the help of wood ashes and a little loosening with a pickaxe, *kodáli.*

Bad Seasons.

17th Century, 1629-1630.

Of only a few of the Ahmedabad famines are details available. In 1629 and 1630 Ahmedabad passed through two years of famine so severe that its streets were blocked by the dying. Those who could move wandered to other countries. The cause of the famine was want of rain, and so great was the distress that people are said to have lived on human flesh. Poor houses were opened at

[1] Dr. Hové (1787). Bom. Gov. Sel. XVI. 58.

Chapter IV. Agriculture.

Bad Seasons.

Ahmedabad for the relief of the famished, and food and money were distributed. All taxes were remitted for two years. During the famine all the male buffaloes died, and after it was over, one was brought from Chámpáner at a cost of £8 10*s*. (Rs. 85). The Ahmedabad district was nearly ruined. About twenty years later (1650) there was a succession of bad years causing a scarcity that in 1650 amounted to famine and caused great suffering. No details are available. Again in 1686 there was a great famine, but of its cause and effects there are no details.

1650.

1686.

18th Century.

In 1718 millet, *bájri*, sold at 6*d*. (4 *annas*) the pound and grain was imported. Numbers of people died, and children were sold for a few shillings. In 1732 Gujarát suffered from another famine. In 1747 not a drop of rain fell nor did a blade of grass grow. In few famines, says the Pádshái Diván can the distress have been greater. Grain rose to 6*d*. (4 *annas*) a pound. The people and the cattle died in numbers. In 1770 according to the Pádshái Diván, unwholesome air and the turbulence of the Márvádis brought on a famine. Thousands of people died of fever in two or three days, so that none could be found to bury them. In 1790-91 an almost total failure of rain caused a famine. The rupee price of grain rose from 160 to 20 pounds (4 *annas* - Rs. 2 a *man*.) Many people went from Gujarát to Málwa. Vast numbers of cattle died and fearful disease and sickness prevailed.

19th Century. 1812-1813.

The famine[1] of 1812 and 1813, though spread over the greater part of Gujarát seems, next to Káthiáwár, to have been fiercest and most destructive in Ahmedabad. Locusts were the original cause of the famine. They were believed to have come from the east in the Bengal provinces about the beginning of 1810, and moving north, to have passed through upper India, and after fifteen months come to Márwár. In 1811 the Márwár rains failed and the people flocked into Gujarát. Able to help them for a time, Gujarát itself was soon reduced to almost equal misery. When, in Márwár (August-September 1811), no green thing was left, the locusts made their way into Pátan in the north-west of Gujarát, and from Pátan passed west into Káthiáwár, and before the close of the year had devoured all the grain, leaving in the fields nothing but useless stubble. The locusts were most destructive in Káthiáwár, and two visitations of them almost destroyed the Ahmedabad crop. Once only were they seen as far south as Broach and by June 1812 they had altogether disappeared. But another evil was in store for Gujarát. The 1812 rains failed, and the short food stores had to bear the double demands of the Márwár and the Káthiáwár refugees. Grain is said to have been imported from Bengal to Dholera, and large local stores were brought out and sold. In spite of this, so great was the scarcity, that the rupee prices of millet rose to eight pounds.[2] The rise in the price of grain, the fears of the people driving each family to husband its stores, and the selfish efforts of

---

1 The details of the 1812-1813 famine have been compiled from Captain J. R. Carnac's letter, dated Baroda, February 1815. Trans. Bom. Lit. Soc I 321 328.

2 Colonel Etheridge's Report on the past famines of the Bombay Presidency (1868)

Chapter IV.
Agriculture.

Bad Seasons.
1812-1813.

grain-dealers to make money out of the distress of the poor, soon brought the refugees into the most grievous straits.

The rich did much to help the sufferers. At almost all the chief towns of Gujarát they joined with the Government in opening relief houses, spending in Baroda several thousand rupees a month and saving large numbers from starvation. But there was little method in their charity and no attempt to keep order. It was a cruel sight to see the struggles when the doors were opened to divide the food. Children were often crushed under the feet of their own parents, and many people died from greed and gluttony.

The destitute, especially the Márvádis, did little to meet the efforts of their well-wishers. Whether it was that the ready help given them on first coming to Gujarát made them suppose they would never be allowed to starve, or from innate laziness, or from the recklessness of extreme misery, they would do no work. It was notorious that in all cases when their well-wishers offered them work they refused it, even though they knew that work alone could save them from death. The difference between the praiseworthy willingness of the Marátha and the careless idleness of the Márvádi was striking.

The sufferings of the people were very terrible. Near all large towns the suburbs were surrounded by the destitute. They squatted under trees at the road sides, men, women, and children huddled together, famished, sick, and dying, some with a scanty covering, others with hardly a rag. Loud complaint and outcry were followed by the most utter and widespread indifference. 'During this time of misery,' writes Captain Rivett Carnac (February 1815), 'I have seen a group of Márvádis deny a little water to a dying woman with a dead infant at her breast, and when she died, sit on letting the body lie till the Government buriers came round. Dogs, by feeding on human flesh, grew strangely fierce. I have seen a pack of them carry off a living child from its sick mother's arms. I have seen them day after day waiting round the dying, ready to feast on their bodies. Even among the higher classes so keen was the distress that for a few shillings Bráhmans sold their relations, children, and wives.'[1] Of the deaths from famine there is no attempt at an estimate.[2] Of several hundred thousand people who are supposed to have come from Káthiáwár very few are said to have returned, and of the Márwár refugees, probably at least as large a body, not more than one in a hundred, ever went back. At Baroda, Captain Rivett Carnac had, in an evening's ride, seen not less than fifty bodies scattered about that the servants of Government had not time to bury. 'The burials in one day were often more than 500; the number who died could scarcely be counted.'

The misery was all the greater because, to the distress from want of food, were added the sickness and other dregs of the Márwár

---

1 Major Gough's account of the state of things in western Ahmedabad goes even further. The low classes lived on the dead cattle, and among the higher castes cases were reported of mothers eating their own children.

2 Bom. Public Diaries, 1820, 217 and 218.

Chapter IV. Agriculture.

Bad Seasons.

famine. The Márvádis came to Gujarát covered with disease; confluent small-pox raged, and the women, prostituting their bodies for food, had contracted diseases little less deadly than small-pox. In Gujarát, in 1812, partly from the general sickness and partly because, except in Baroda, the bodies of the dead, both of man and beast, were allowed to lie unburied and taint the air, a pestilence broke out, that in Ahmedabad city alone is said to have carried off 100,000 souls, or one-half of the people.[1]

1819-20 and 1824-25 were years of short rainfall and failure of crops. In 1834 the rainfall was again short and the distress increased by swarms of locusts. The rupee price of grain rose to ten pounds (Rs. 4 a *man*). In 1838 there was a failure of the usual supply of rain. In September 1875 the city of Ahmedabad and three eastern sub-divisions were visited by extraordinary floods in the Sábarmati. Two iron bridges and a large portion of the town were washed away, and in the districts one hundred and one villages suffered very severely both in houses and land.

Locusts.

Locusts occasionally appear though not often in very large numbers. Frightful devastation was wrought by them in the Dhandhuka sub-division in 1812, and in 1869, in various parts of the district they did much damage. The people endeavour to keep the swarm from settling by beating tom-toms.

White Ants.

White ants eat the roots of sugarcane, especially in the higher land where there is less moisture in the soil to check them. The small holes dug for the reception of the cuttings are filled up with tank deposit, which is to some extent a preservation against these insects. When about a cubit high, the plants are carefully examined, and if it appears that they have been attacked, the refuse of castor-oil seeds, *khol*, is applied at the rate of from 11 to 14 cwts an acre. The main remedy known is frequent irrigation.

Khápri.

The *khápri* is a winged insect which does much mischief, especially when rain holds off, by eating the springing blades down to the ground. In the event of an unseasonable drought many other insects and small animals, such as rats, multiply enormously and prey upon the crops they especially affect. A steady rainfall clears them away. With reference to this, as in all the ordinary affairs of life, the cultivators pay great attention to the *nakshatrás*, or twenty-seven lunar mansions of the Hindu zodiac, each of which is supposed to be under the domination of a special supernatural influence. Thus it is believed that rain during the *mrig nakshatra* which commences on the 5th June, always preludes a great abundance of insects, and that if rain falls during the *punarvasu nakshatra* which commences fourteen or fifteen days afterwards, millets will suffer from a tiny animal generated inside the stalk.

---

1 Details are given below, p. 220. The estimate 100,000 is probably excessive. Other returns seem to make it likely that at this time the whole population of the city did not exceed 100,000 (see below, p. 293.)

Chapter IV.
Agriculture.

Mildew.

Geru or mildew first discovers itself by turning the young plant, including its root, to a reddish colour. After a time the sickly hue of the stalk and the reddish spots on the leaves can be easily detected by the eye at a distance, and finally when the ear has come to apparent maturity the grain is found to be shrivelled and useless. In some seasons this pest destroys from 25 to 50 per cent of the crops it attacks, but happily it is almost confined to irrigated wheat, in consequence of which barley, though a less valuable product, is often grown in preference to a *rabi* crop. The evil is said to be aggravated by over-flooding the fields, by cloudy weather at Christmas time, and by a warm winter.

Other diseases, such as *kambori* which attacks rice after plentiful rain; *haldarva* which attacks rice after its transplantation, and the white variety of sugarcane; and *nolu* which attacks millet, *juvár*, are probably forms of mildew, but they have never, so far as is known, been subjected to a scientific investigation.

Cold.

Excessive cold though seldom, amounting in this district to frost, sometimes causes great damage to castor-oil and cotton. The susceptibility of the latter crop when grown in *gorádu* soil is so great as to check its cultivation in the Daskroi sub-division. Attempts are made to ward off the evil by lighting fires to the windward of the field. Wheat and barley, the two other staple winter crops, are little affected by it.

CHAPTER V.

CAPITAL.[1]

Chapter V.
Capital.
Capitalists.

According to the 1872 census returns there were in that year, besides well-to-do cultivators and professional men, 12,080 persons occupying positions implying the possession of capital. Of these 1656 were bankers, money-changers or shopkeepers; 8426 were merchants and traders; and 1998 drew their incomes from rents of houses and shops, from funded property, shares, annuities and the like. The following is an abstract of the income-tax returns during the four years ending 1873:

Ahmedabad Income Tax Returns, 1869-1873.

Class.	From £50 to £100.				From £100 to £200.				From £200 to £1000.				From £1000 to £10,000.				£10,000 and upwards.			
	1869-70.	1870-71.	1871-72.	1872-73.	1869-70.	1870-71.	1871-72.	1872-73.	1869-70.	1870-71.	1871-72.	1872-73.	1869-70.	1870-71.	1871-72.	1872-73.	1869-70.	1870-71.	1871-72.	1872-73.
Bankers and money dealers	283	274	37	...	172	146	47	110	105	105	23	95	21	13	12	10	..	.	...	..
Merchants	953	964	70	...	153	97	54	216	12	18	12	23	3	..	2	2	...	...	.	..
Holders of Government securities	9	...	...	...	7	...	...	...	...	...	...	...	..	...	..	..	..	..	...	...
Persons receiving interest from other than Government securities .	354	301	77	...	100	88	38	212	17	19	6	21	1	...	..	..	..	.	..	..

Although the capitalists of this district, more especially those carrying on business in the city, suffered heavily on the collapse of the share-mania in 1866, there are still among them men known to be worth as much as £100,000 to £120,000 (ten to twelve *lákhs* of rupees), and both in Dholera and Viramgám are firms able, on presentation, to cash a bill for £5000 (Rs. 50,000). According to the 1872 census returns there were in the district 129 bankers proper not money-changers, and 366 bankers and bullion-dealers. The account-books kept in the largest establishments are the same as in Broach with the addition of the two following: (1) the *ánkrávahi* or ready reference ledger, posted daily direct from the cash book. Its object is to show the state of each customer's account more readily than the ledger which is not posted from the *ávro* until some time after the transactions have taken place; (2) the *upartapka* or memorandum book in which are made debit and credit entries intended for speedy adjustment and not liable to interest. Should delay arise in the case of any particular item it is transferred to the cash book. Foremost among the banking houses are a certain

[1] This chapter is contributed by F. S. P. Lely, Esq., C. S.

Chapter V.
Capital.
Capitalists.

number of old standing and of highly respectable character who are chiefly located in Ahmedabad, but a few are to be found in the more important of the smaller towns. In the time of Native rule they used to follow the revenue-collecting, *mulakgiri*, forces on their tours, and found a profitable business in advancing the soldiers' pay on the security of their commanders, and in other miscellaneous army agency. They had branch houses at Delhi and Poona, then the seats of government. To meet the exigencies of the trade which sprang up immediately after the introduction of British administration they, in common with less eminent houses, partially altered the character of their business. Many of them, in the city, embarked in opium investments (1819) which speedily assumed such dimensions that they are said to have netted in one year £1,000,000 (a *kror* of rupees). This trade, which was estimated in 1849 to employ £500,000 (50 *lákhs* of rupees), has since passed into the hands of merchants in Visnagar, Sidhpur, and other towns in the Baroda state. At present, it may be said, that the first class banking firms of the district employ their capital chiefly in loans, but also in buying and selling bills of exchange, in insurance; and in gambling. They also act as agents in the purchase of cotton for firms in Bombay and elsewhere, and at times speculate in that article on their own account. A few in Viramgám and Dholera make advances on cotton to large landholders, and even keep agents, *gumástás* to tour through the villages of their connection to collect outstanding debts and obtain new constituents. The majority, however, chiefly confine their loan transactions to a second class of bankers such as are to be found in all the towns and many of the larger villages, men who work beyond the limits of their own capital and who, to money lending and a small exchange business, add an export trade in produce for which their intimate business relations with the agriculturalists afford especial facility. They advance money on cotton crops and at the same time buy for forward delivery. Large sums are withdrawn by these persons, when the Government assessments are falling due, from the first-class banking houses in Ahmedabad with which they have credit. Lowest of all in the ladder of professional money-lenders is the village shopkeeper, who is generally a Vánia but sometimes a Bohora, a Bráhman, a Bhátia, a Luhána, or a Kanbi. He has sufficient credit to raise a limited sum from a town firm to eke out his own means in buying his shop-stock at the nearest local market, and to lend to the poorest classes in small sums ranging from 2*s*. to £10 (Re. 1 - Rs. 100). A few in the larger villages import their supplies direct from Bombay and work entirely on their own capital. As to the caste of the superior capitalist classes it may be noted that in former days they were mostly Shrávak Vániás, but of late the predominance of that sect has been impaired by the Vaishnavs, that is to say, by the Meshri Vániás and the Kanbis. In Dholera the Shrávaks and in Dhandhuka and Dholka the Meshris are the more numerous, while in the city of Ahmedabad, as also in Viramgám, Parántij, and Modása, the two are pretty equally balanced. Kanbis, chiefly of the Kadva sub-division, who have for generations abandoned agriculture for trade, possess much wealth in the city and also, though few in

numbers, in Viramgám, Bávla, and elsewhere. To these may be added Bohorás, a few Khojás in Dholera, a few Shrimáli, Modh, and Audich Bráhmans in Dholka and Dhandhuka, a few Bárots in Viramgám, and a few Pársis in Ahmedabad. During the cotton season many agents enter the markets of the district with outside capital from Limbdi, Wadhwán, Visnagar, and Bombay.

Chapter V. Capital.

Under the Márátha rule, owing to the irregular manner in which their revenue was collected and the constant transfer of money to the Deccan, there was a considerable traffic in bills, *hundis*, which was shared by the Viramgám merchants with those of Ahmedabad. In the early times of British rule, we find that the small quantities of bullion necessary to adjust the exchanges of the district, were conveyed by camel from the port of Dholera, but with the increase of exports and the opening of the railway nearly all bills have come to be drawn through Ahmedabad. The extensive consignments of oil-seeds from Pátan and Rádhanpur through Viramgám, are paid for by *hundis* on that city from which bullion is carried direct by cart. Dholera is still maintained by its geographical position on an independent footing, and bills at sight are drawn there direct on Bombay at from $\frac{3}{16}$ to $\frac{3}{4}$, and on Ahmedabad at from $\frac{1}{8}$ to $\frac{1}{2}$ per cent discount. In Ahmedabad, previous to the opening of the railway, bills on Bombay sold during the season at a minimum discount of $\frac{5}{8}$, but the ruling rate is now from $\frac{3}{8}$ to $\frac{1}{2}$ per cent.

Bills of Exchange.

About 1862 the old Bank of Bombay established an agency in Ahmedabad, and afterwards opened subordinate offices at Wadhwán, Dholera, and Bhávnagar for the special purpose of buying bills, *hundis*, drawn against cotton bought by Bombay merchants. Its example was followed in the city by the Royal and the Central Banks, but after a few years they all three succumbed to the influences of the time and had to close their doors. The native bankers were then left in full control of the district until the New Bank of Bombay, now the Bank of Bombay, opened a branch in 1870. It operates principally in bills drawn against cotton, but although it has no doubt appropriated a large amount of business, the shroffs are still strong enough to compete with it. The Bank also receives charge of the balances in the Collector's treasury, binding itself to maintain a staff sufficient for conducting the current duties of receipt and disbursement, and to credit the surplus funds in the general treasury in Bombay at par. In return it has the power of utilizing the balances in its own operations.

Bank of Bombay.

Insurance against theft and damage of goods in transit by land was formerly an incident of the Ahmedabad banker's business, but it has ceased since the railway has made such precautions unnecessary. Consignments intended for through transmission into Málwa and other parts of the interior are insured in Bombay, or at least by agents of Bombay firms in Ahmedabad.

Insurance. *Risks by Road.*

The business of marine insurance[1] is confined to the port of Dholera where policies are issued, either according to local usage,

Risks by Sea.

[1] The details about marine insurance have been kindly supplied by Mr. A. Whittle, of Messrs. Greaves, Cotton, and Company.

Chapter V.
Capital.
Insurance.
Risks by Sea.

gámno shirasto, or according to a modification of the English practice introduced in the year 1869. The former is a system of covering risks free of particular average, the conditions of which may be summarized as follows : (1) no premium or claim to be considered due until the month of June, *jeth*; (2) two annas ($\frac{1}{8}$th) of the premium rate to be deducted in favour of the insurer; (3) $1\frac{1}{2}$ per cent of the total net premium to be returned to him in June; (4) 86 per cent only of the amount insured to be paid in case of loss; (5) in case of a boat putting into a port on the way to save loss only half the premium to be recovered; (6) in case of damage or loss two per cent of the value of the cargo damaged to be retained by the underwriters; (7) in case of damage or loss one-half the freight (which is usually payable in Bombay) on the portion damaged to be paid to the underwriters; (8) in case of loss or damage, the amount to be assessed by the Bombay agent of the underwriters together with a representative of the insurer, if it occurred outside the port of Dholera, and by a committee of underwriters if it occurred inside; (9) any boat not heard of within three months from date of sailing to be considered a total wreck. For the issue of policies under this system, there is formed at the beginning of each season, a body of underwriters comprising formerly thirty-five to forty firms but now not so many. One member among them takes the lead in the acceptance of risks and in the general management, assisted by a broker who receives as remuneration three pies per cent on the amount of premiums recovered. This system was found to work well enough so long as the underwriters did not lose on the whole season and consequently were under no particular temptation to dispute their obligations, but when it happened otherwise the complication and laxity of the conditions opened a wide door to evasion of which advantage was readily taken. As a fact, in such cases the insurer was almost always compelled to accept an injurious compromise. It is true that of late years quicker communications, and wits rendered sharper by education, have enabled the up-country shipper better to protect himself, but it was still felt that a more business-like system was desirable. Accordingly in 1869 a modification of the English system was introduced, the distinctive features being greater simplicity and prompter payment. The conditions may be thus summarized: (1) the premium rate to be 25 per cent in excess of that chargeable under village custom, *gámno shirasto*; (2) the premium to paid over at once to the underwriter's credit; (3) all loss, less two per cent, to be paid over to the insurer within one month from the date of the salvage inspection; (4) the amount of loss on partially damaged cargoes to be fixed by the underwriters and the shipper if within the port of Dholera, or by their representatives if outside. In case of dispute an umpire may be called in, whose decision shall be final.

Gambling.

A large amount of the professionally-owned capital of the district is diverted from the legitimate operations of trade to speculation, or more correctly, to gambling by means of anticipation bargains, *váida*. 'This practice,' writes Mr. Fawcett in 1849, 'still prevails

Chapter V
Capital.

Gambling.

notwithstanding the Act lately passed. Speculation on the rise or fall of the opium sales in Calcutta is still carried on as a system, and even the young people of the merchants' families bet on the average of the sales at Calcutta, beginning by betting in *badáms*, the smallest amount in use, reckoning 12 to one pie.'[1] Opium gambling has decreased with the decline of the opium trade, but this demoralizing practice is as rife and as systematized as ever, in connection with all the other leading objects of trade except perhaps grain. One party agrees to deliver on a certain date to the other, say 8¾ tons (500 *mans*) of raw sugar at a certain price, the understanding being that he will merely pay over or receive the difference in cash between the contracted rate and the market rate of that particular day. To facilitate such transactions sub-committees are appointed by the *Mahájans* for the purpose of fixing the days on which gambling bargains shall close for each particular article and authoritatively declaring the market rate on those days. In Ahmedabad, bargains in cotton are based on prices in Bombay, and are terminable on the 2nd of each native month. In Dholera they are terminable on the second of the dark half of *mágshar*, December, and of *vaishákh*, May, that is twice a year, and are based upon Bombay quotations on those dates plus 30*s*. (Rs. 15). The decisions of the sub-committees as to the ruling rates are by no means completely impartial, and it is well understood that if an influential member of the guild is heavily hit they will endeavour to mitigate the blow for him.

Classes who Save.

On the whole the tendency of capital of late years has been to diffuse itself, so that while fewer large fortunes have been amassed, the number of persons who have acquired a small competence has much increased. In the cotton villages the thrifty Kanbis saved money during the high prices at the time of the American war, some of which they still retain, but not so the other classes of cultivators or even the Kanbis in other parts of the district. The labourers and artisans mostly spend their increased earnings in fine clothes and feasts. The people who both can and do accumulate permanent wealth at the present moment are chiefly pleaders, higher Government servants, and the steadier traders.

Modes of Investment.

Generally it may be said that the first impulse of the non-professional as of the professional capitalist is to put his money out at usury. Even the cultivator does this though he confines his transactions to relatives and very intimate acquaintances. Land is also sometimes bought as a speculation by urban residents especially in the neighbourhood of Ahmedabad. Hoards are kept by the artisans and labourers and to a certain extent by all classes in the shape of ornaments; also by old trading houses in the shape of the obsolete coinage of the country. In former days superior land-holders, *tálukdárs*, traders and well-to-do people generally, were in the habit of storing the surplus grain of a plentiful harvest in

[1] Bom. Gov. Sel. V. 82.

Chapter V.
Capital.

pits, a separate pit for each year. With the first-named however it was a matter of necessity rather than of choice, since if the local crops were good there was no market for their grain. Now that, owing to improved communications, local prices are raised by a scarcity in the remotest part of India, these improvident people lose no time in converting their produce into money which they dissipate in unproductive expenditure. The same cause is said to have brought about a diminution in the food stores even of the more thrifty classes. The practice of buying Government securities and of putting money in savings banks has during the last twelve years spread considerably. The interest on Government securities has risen from £2026 (Rs. 20,260) in 1865-66 to £4820 (Rs. 48,200) in 1877-78 and the deposits from £7620 (Rs. 76,200) to £46,798 (Rs. 4,67,980).

Borrowers.
Townsmen.

Owing to the contraction of former outlets for capital and the conservative disinclination of old houses to turn their money into new channels, a resident merchant or banker of unblemished repute can raise a loan in the city of Ahmedabad for a short period at four and sometimes as low as two per cent per annum. That is the rate also he would allow for deposits. The second class banker or merchant can obtain advances from one of the first class at from three to six per cent if he is a known and approved client. The third class can in his turn, under similar circumstances, borrow at six to eight per cent. A respectable artisan or average householder, in those rare cases when he deposits movable property of equal value, is charged five or six per cent in the country and 2½ or 3 per cent in the city where the competition between lenders is keener. On mortgage of a house, if without possession, the rate is from 4½ to 7½ per cent; if with possession the rent is taken in lieu of interest. The terms he will obtain, if he offers only personal security, vary from six to twelve per cent according to the lender's opinion of his means and character. Men of a lower class, who are not possessed of any substantial property, have to find sureties from among their relations or friends, and even then are charged at rates ranging to as high a limit as eighteen per cent. A large number of handicraftsmen having no capital of their own require advances for the purchase of raw material, and the terms on which they obtain such from the local lender are commonly regulated by some special understanding. The variations in local usage are almost endless, but a few examples may be given to indicate its general character. Dyers receive plain cloth on free credit, provided payment be made for it within a period varying with the custom of the locality and the trustworthiness of the recipient, from two to six months, after which in case of failure interest at six to twelve per cent is charged. Oilpressers receive their loan in cash, but, if the amount exceeds £20 (Rs. 200) or so, the seed when purchased is deposited in the custody of the creditor and given out for grinding by instalments. If the seed is small in quantity, and therefore not so deposited, the advance is booked and a bond executed with or without security according to the confidence reposed in the borrower. Elsewhere, again, the practice is for the broker, *dalál*, through whom the seed is bought,

Chapter V. Capital.

Borrowers. *Townsmen.*

to pay down the price and to charge nothing thereon but his commission of one per cent, if the whole is repaid within a month or thereabouts. So even the Dhed weaver, if an approved customer, can get a loan of £1 (Rs. 10) on his own personal security, for the purchase of hand-made yarn on condition of his paying up as soon as he has sold the manufactured cloth. Ten per cent is deducted at the time of the advance, and interest is charged at from nine to eighteen per cent per annum according to the promptness he has shown in previous similar transactions. If machine-made yarn is required, it is supplied by the Vánia himself, and booked at an advance on the market price of from 3*d.* to 1*s.* (2 - 8 *as.*) per 10*s.* (Rs. 5), according to the term fixed for payment.

The power of an unskilled town labourer to secure a loan and the terms thereof depend almost entirely on the personal character he bears. Márvádis and others who have not become attached to any one permanent residence cannot get credit for even the smallest sums. A domiciled labourer of the lowest class, provided he be earning regular day wages, may raise £1 (Rs. 10) on executing a bond with or without security to repay £1 2*s.* (Rs. 11) by monthly instalments of one rupee with interest at twelve per cent per annum on arrears. A respectable man on monthly wages may, with the aid of two or three relations as securities, be able to raise from £10 to £15 (Rs. 100 - Rs. 150) at from nine to twelve per cent interest, besides a premium of from 1*s.* to 2*s.* (8 *as.*-1 rupee). Almost every loan transaction is accompanied by the payment of a premium which goes by the name of *vatáv,* discount; *mandámni,* a fee for booking the debt, or *kothlisánth,* a fee on opening the bag. Occasionally it assumes the form of a payment on the liquidation of the debt and is then called *áratna.* It is these incidental charges which often swell immoderately the burden of a debt. A Gogha sailor can get an advance for his wife during his absence on a voyage, subject to an immediate deduction of twenty per cent from the principal, but not bearing interest for eight months; after that period 1½*d.* (one *anna*) per 2*s.* (rupee) per month is charged. It should however be noted that the burden of a debt ordinarily lies heavier on the labouring classes than might be inferred from the above, since with their characteristic improvidence they seldom pay up the stipulated instalments, and thus the lender gains an excuse for exacting fresh bonds for the arrears with interest and a further premium.

Villagers.

The most substantial of the rural classes commonly borrow, not from their village shopkeeper, but from the banker in the neighbouring town. From such clients no mortgage or even bond or security is ordinarily required. A sufficient guarantee is held to be the honourable position in his village which has been transmitted to him by generations of ancestors. Small advances are merely entered in his current account like an ordinary shop debt, and even if the sum be large, the only additional precaution is to cast up the account and take an admission of the correctness of the balance upon a receipt stamp. The average rate of interest is 7½ per cent but occasionally it runs as high as nine or as low as six per cent. The great mass of Kanbi cultivators and others on a similar footing,

Chapter V.
Capital.

Borrowers.
Villagers.

being already encumbered with debt up to though not, as a rule, beyond their assets, are not considered so perfectly trustworthy. It is impossible to give precisely data which depend entirely on the estimate formed by the lender in each particular case of the probity and means of the borrower and his friends. Generally it may be said that this class can only obtain loans on stamped bonds with or without securities, but that they are left free to realize the produce of their fields as they please. The rate of interest they pay varies from twelve to eighteen per cent exclusive of a premium. Ornaments are not usually deposited in pawn even by this second class of cultivators, and to offer them would be taken as an indication that the owner's credit was at its last gasp. Nor is a formal mortgage ever executed of a respectable man's movable property though his land is commonly hypothecated. Finally we come to the lowest order of landholders, including notoriously insolvent Kanbis and the great majority of Kolis, who fail to get more favourable treatment, not only because of their almost invariable poverty, but because of the stigma which still attaches to them as a caste. Such persons at the opening of the cultivating season (June-July), if the rains are favourable, obtain grain for seed and subsistence, repayable when the crop is reaped at an enhancement of twenty-five to fifty, and in extreme cases even 100 per cent of the quantity advanced. The Vánia appropriates the whole of the crop as soon as threshed and credits it in his books at a price settled in many villages by a mixed committee of Vániás and cultivators, but sometimes by the lender alone. Against this he debits the grain already advanced and also a quantity, generally from $5\frac{5}{14}$ to $8\frac{13}{14}$ cwts. (15-25 *mans*) for the subsistence of the borrower and his family through the year. For cash advances he charges twelve to twenty-four per cent besides a premium. It is not unusual for a very poor man to borrow a bullock for the season, giving security for its return, together with the payment of $1\frac{11}{14}$ or $2\frac{1}{7}$ cwts. (5 or 6 *mans*) of grain for its use. Seed he sometimes procures from a richer cultivator in recompense for the services of his son or some other member of his family.

The power of a rural labourer to raise a loan depends entirely on the nature of his employment and his own character. It is said that, as in the case of Márvádis in towns, money lenders refuse to treat with cattle graziers, because they are in the habit of roaming from place to place in search of fodder. Any transaction with them must be conducted through their women who remain more stationary. The ordinary earner of day wages is not able to obtain more than very small sums even if some others of his own class stand as securities. He may however obtain more if, as is sometimes done, a condition is inserted in the bond that on failure of payment within a stipulated period the obligor shall become a field servant of the other, receiving food and clothes and fixed wages to be written off against the debt until it is liquidated. The interest in any case varies from fifteen to twenty-four per cent. A cultivator who has a servant in his permanent employ sometimes stands security for him to the extent of £5 to £7 (Rs. 50-Rs. 70) if he is in real need of

Chapter V.
Capital.

Borrowers.

the money, and by this means enables him to borrow on the same terms as he can command for himself. It may however be predicated of the great mass of Kolis, Vághris, Dheds, and other rural labourers, that they have never had sufficient credit to be in debt.

The class of superior landlords, *girásiás* and *kasbátis*, stands in some measure by itself. People of this class are said to raise money in three ways: (1) on deposit of articles in pawn at six per cent; (2) on mortgage of land or crops without possession, at nine to fifteen per cent, with a premium of two to ten per cent; (3) on mortgage of land with possession, in which case the interest is written off against the rent, with a premium of five to ten per cent.

Rates of Interest, 1819-1849.

The institution of regular courts of law, and the consequent knowledge of both parties that there existed a means both accessible and efficacious of compelling payment, led immediately to a decrease in the rate of interest as well as an extension downwards of the Vániá's clientele. Already on the 1st July 1819, Mr. Dunlop reported to Government, that the exorbitant rates of interest formerly paid were no longer demanded and that even the present rates were gradually falling. *Manoti*, a sort of premium which the cultivator often found it convenient to pay a money lender to induce him to become security for his rent and so save him from the necessity of selling his crops out of hand, was according to Colonel Walker twenty-five per cent on the first establishment of British authority, but in 1819 had already diminished to an average of two per cent, and half that in some places. The rate paid by a village community for advances was quoted at twenty-four per cent per annum in 1816 and at twelve per cent in 1820.[1] Lieutenant Melvill records that in 1827 the Parántij cultivator paid 'fifteen to twenty-five per cent besides a premium which was added to the sum lent, interest being charged on the whole,' whereas now in the same district there are many who can raise loans at six to eight per cent. In 1849 Mr. Fawcett quoted the rate of interest on the security of land paying rent to Government at twelve to eighteen per cent.

Currency

Ahmedabad being the capital of Muhammadan Gujarát always contained a mint. Its operations were conducted on account of the Government by workmen whose posts were for the most part hereditary, under the superintendence of some selected mercantile firm of repute. The sum of £1 6*s*. 6*d*. (Rs. 13-4) was allowed for each £100 (Rs. 1000) coined and allotted in certain fixed proportions to religious objects and to the employés. Besides coin, gold and silver wire were manufactured in the establishment. Under the Maráthás the Ahmedabad *sicca* rupees continued, with the addition of a few marks, to be issued as before, and to be the chief local medium of exchange as far as the centre of Káthiáwár. In the lawless western half of the present district, where the tenants paid their rent in kind, there was probably little coin of any sort in use until the establishment of British rule in 1802-3, when the Surat rupee

[1] Mr. Dunlop to Government, 1st July 1819 and 23rd November 1820.

Chapter V.
Capital.
Currency.
A'nt.

bill could be drawn on any place otherwise than subject to this uncertainty, nor would a Bombay banker drawing on Ahmedabad be able to tell how many rupees in cash the bill would command; payment being made in the former case according to the rate of the day when the bill was purchased, and in the latter according to that of the day on which it fell due. An incidental consequence of this was that the Bombay bankers made their remittances indirectly through Broach, Surat, and other places where *ánt* was unknown. So strongly were these evils felt even by native rulers, that about 1805 Kákáji Gáikwár's subhedár ordered that all bills in *ánt* should henceforth be encashed at the invariable rate of 6¼ per cent in favour of the *ánt*, but this would probably have soon proved a dead letter even if the subsequent stoppage of the mint had not set the old system once more in full swing.[1] In 1818 Mr. Dunlop strongly advocated its prohibition by law.[2] But within the next twenty years the more subtle and sure agencies of a sufficient and honest metallic currency and a safe though not yet speedy communication with Bombay had worked a cure, and by 1846, the year in which Mr. Fawcett recurred to the subject, *ánt* was apparently confined to Dholera, whose remote position still encouraged the use of such an expedient. To check its accompanying evils the trading guild or *mahájan* of that town agreed in 1845 to limit the price to 115 per cent after a certain date at the end of the season. This action proved futile at the time, but as in Ahmedabad, the course of events soon made a renewed attempt unnecessary, and though nearly all banking transactions at that port are still carried to account in *ánt*, the pernicious abuse of it no longer exists. Every merchant now has it in his power to check any undue inflation, and the price which in 1843 went up as high as 125 per cent now seldom if ever rises beyond 103 per cent. According to the present practice a rate of discount for cash on *ánt* is fixed by the trade guild at the beginning of the season and from that time, subject only to the slight disturbing influence of variations in the local value of money, it decreases regularly as the year wears on until the end (June), when all accounts are by the custom of the port adjusted and the rate of conversion is par.

Mortgages.

According to the registration returns mortgages in excess of £10 (Rs. 100) have risen from 999 of the value of £74,208 (Rs. 7,42,080) in 1869-70 to 1718 of the value of £84,038 (Rs. 8,40,380) in 1876-77.[3]

Wages.
Field Labourers.

Almost every cultivator, who can afford it, engages at least one labourer for the rainy season (June-October) or, if he grows a cold-weather crop also, for the double season commencing in the beginning of June and ending at the *Holi* (March-April). Wages for the

---

1 The *hali sicca* rupees, first coined under the Peshwa after the resumption of the Gáikwár's farm, were sometimes supposed to represent *ánt*. What they did represent was *ánt* at the rate of exchange for bullion fixed by Jaktáji.

2 Most of the above details have been derived from Mr. Dunlop's Reports to Government.

3 The detail[illegible]e, in 1869-70, 999 value £74,208; in 1870-71, 1593 value £78,653; in 1871-72, 2223 value £126,363; in 1872-73, 2280 value £109,646; 1873-74, 2033 value £92,890; in 1874-75, 1567 value £87,873; in 1875-76, 1563 value £94,541; in 1876-77, 1712 value £82,532; in 1877-78, 1718 value £84,038.

Chapter V
Capital.
Wages.
Field Labourers.

longer period range from 12*s.* (Rs. 6) for a boy to £2 16*s.* (Rs. 28) for a thoroughly skilled adult, besides meals from the employer's own mess, a suit of clothes, and occasionally an allowance of tobacco, snuff, or other small luxury.[1] These relative proportions of cash and kind, however, vary from village to village and even from holding to holding. Sometimes, for the rainy season, the labourer receives from one-sixth to one-fourth of the crop, and nothing further. In Modása the agreement, whatever its nature, almost invariably provides for victualling the labourer for fifteen days, the object being, it is said, to restore his strength exhausted by the privations of the hot weather.

The rate for agricultural day labour as quoted[2] in 1821 and again in 1849[3] was 3*d.* (two *annas*) the male adult. Most of the field-work, for which it is necessary to call in temporary help, is performed on special terms. For example weeding is done by women, who are sufficiently remunerated by being allowed to take the weeds home as fodder for their buffaloes. Márvádi reapers in the wheat district are hired by the gang at the daily rate of 2*s.* (Re. 1) for four to six men. Rice is cut at 3*s.* (Re. 1 - 8 *as.*) the acre. Labourers at sugar-cane pressing, in addition to 3¾*d.* or 4½*d.* (2½ or 3 *annas*) for stoking the fire and feeding the mill, and about 2*d.* (1¼ - 1½ *annas*) for preparing the canes, are allowed to eat as much as they wish during the day, and to carry home three canes each at night. Each also receives at the end of the job a small quantity of raw sugar proportioned to the total outturn. Cotton is picked sometimes at day-wages and sometimes for an allowance of from one to two pounds in every forty pounds, *man.*

Artisans.

The average daily wage for a bricklayer in 1821 was 7½*d.* (5 *as.*) It is now 1*s.* (8 *as.*) except in Dholka where lack of work and superfluity of workers, of the degraded class of Bráhmans known as Tapodhans, have kept the nominal wage down to its former level. The nominal rate for carpenters has risen from 9*d.* (6 *as.*) in 1821 to 1*s.* 6*d.* (12 *as.*) in 1877. In the steam factories smiths get from £1 10*s.* (Rs. 15) per month for an ordinary workman up to £3 10*s.* (Rs. 35) for a *mestri* or foreman. Fitters get £1 10*s.* to £2 10*s.* (Rs. 15 - Rs. 25); firemen £1 to £2 (Rs. 10 - Rs. 20); bricklayers £1 10*s.* to £2 4*d.* (Rs. 15 - Rs. 22). The monthly wages of ordinary male adult operatives vary from 12*s.* or 14*s.* (Rs. 6 or 7) in Dhandhuka to 16*s.* or 20*s.* (Rs. 8 or 10) in Viramgám during the busy season. Women and children are employed for feeding the cotton gins at daily wages of 3*d.* and 2½*d.* (2 *as.* and 1½ *as.*) respectively, but in the busy season these rates rise to 4½*d.* and 3*d.* (3 *as.* and 2 *as.*) In the spinning and weaving mills according to their skill the monthly wages of women range from 10*s.* to 18*s.* (Rs. 5 - Rs. 9) and of children from 6*s.* to 16*s.* (Rs. 3 - Rs. 8). The hours of work

---

[1] Agricultural wages in kind in Sánand for the rainy season (June - October) are said, in the last thirty years, to have risen from 5 cwts.—7 cwt. 3 qr. 12 lbs. to 8 cwt. 3 qr. 20 lbs.—11 cwt. 1 qr. 20 lbs. (14 to 22 *mans* to 25 - 32 *mans*) grain.

[2] Magistrate's Return, 28th January 1821.

[3] Bom. Gov. Sel. V. 25.

Chapter V. Capital. Wages.

in the factories are from daybreak to sunset, but during the busy season 1¼ day is often made in the cotton gins. In some establishments half an hour is allowed for meals, but in some of the gins a member of the workman's family brings his food and takes up his task while he is eating. For totally unskilled labour the rate varies from 4½*d.* (3 *as.*) in Dholka to 7½*d.* (5 *as.*) in Ahmedabad at the busiest time as against 3*d.* (2 *as.*) for men and 2¼*d.* (1½ *as.*) for boys in 1849. Generally it may be said that all urban labourers, both skilled and unskilled, command higher rates in Dholera, Viramgám and Ahmedabad than elsewhere, and higher rates in those places between October and December, and between February and June than at other seasons.

Piece Work.

The system of working by the piece is gradually making its way in the towns, and large wages are earned in this manner during the height of the cotton export season in Dholera and Viramgám. Two men bringing their own *charka* or country gin are paid according to the weight of seed they extract, at the rate of 2*s.* for 120 to 140 pounds (one rupee for 3 to 3½ *mans*) between November and March, and between March and June 2*s.* for 100 pounds (one rupee for 2½ *mans*). By working, as many do, till very late hours a daily outturn of 120 to 140 pounds (3 to 3½ *mans*) may be obtained, but the average quantity is about eighty pounds (2 *mans*). Similarly pressing cotton at the native screws is paid for at £3 4*s.* (Rs. 32) the hundred bales; loading and unloading for the timber merchants at 2*s* (Re. 1) the hundred *mans*; unhusking cocoanuts at 2*s.* 6*d.* to 3*s.* (Rs. 1¼ - Rs. 1½) the thousand nuts; and so on. A woman can in her own home unshell forty pounds (one *man*) a day of *kapás* or shelled cotton; for this she gets 1½*d.* (one *anna*) in quiet times, but sometimes as much as 9-10½*d.* (6-7 *annas*) when trade is brisk. In the Parántij soap factories there are sixteen men engaged on each boiling, who receive a lump sum of 10*s.* (Rs. 5) for the whole work. Of this 2*s.* 6*d.* (Rs. 1-4 *as.*) is apportioned to the two boilers, 6*d.* (4 *as.*) to the two water carriers, and the rest is divided among the twelve who make up the soap. An oilpresser, who does job-work, grinds any quantity of *tal* seed in return for being allowed to keep the cake which is valuable as cattle food; otherwise the employer pays him at the rate of 9*d.* (6 *as.*) the *man* of seed. A Dhed weaver, if supplied with yarn, is paid at the rate of 2*s.* (one rupee) per piece of cloth two feet broad and thirteen to twenty yards long according to texture. He is moreover only expected to return the same weight of cloth as he received of yarn, whereby out of every five pounds of yarn he can retain about half a pound in exchange for the same amount of size.

Prices.

A statement of produce prices, reaching back as far as 1813, is given below. For the first eleven years the figures refer only to one portion of the district, the Dholka sub-division. Since 1824 they are supposed to represent average prices over the whole district. Of the staple grains, statistics for millet, *bájri*, are not available for the years between 1823 and 1861. Taking therefore the other staple grain Indian millet, *juvár*, the average rupee-price during the period

Chapter V.

Capital.

Prices.

of sixty-five years is[1] sixty pounds, or excluding eleven years of abnormally high and eight years of abnormally low prices, an average of fifty-nine and a half pounds. The eleven years of highest prices, which varied from sixteen to thirty-two pounds, were sixteen pounds in 1813 and 1864; nineteen pounds in 1869 and 1870; twenty-two pounds in 1863; twenty-three pounds in 1820; twenty-five pounds in 1814; twenty-six pounds in 1865; twenty-nine pounds in 1871; thirty-one pounds in 1867; and thirty-two pounds in 1877. The years 1863 to 1865, 1867, and 1869 to 1871, when the high price of Indian millet was due to the cheapness of money rather than the want of grain, were times of the greatest agricultural prosperity. 1813, 1814, 1820, and 1877, were years of famine or scarcity. The cheap years, of which there have been eight, 102 pounds in 1843, 107 in 1856, 108 in 1851, 113 in 1855, 114 in 1831 and 1832, and 120 in 1829 and 1830, have been times of complaint and more or less agricultural distress. Excluding the years of special scarcity, the whole series may be roughly divided into seven periods. From 1815 to 1819, a time of dear grain, with an average price of forty-five pounds; then, after the scarcity in 1820, five years of moderate prices varying from forty-six to sixty-four and averaging fifty-three pounds. This was followed by a period of eight years (1826-1833) of cheap grain, the prices varying from eighty-one in 1826 to 120 in 1829 and 1830 and averaging 103 pounds. Of these eight years, during the first five the prices fell steadily, and then taking a turn rose to eighty-seven pounds in 1833. Again from 1834 to 1840 was a time of moderate prices, the returns for Indian millet varying from thirty-nine in 1834 to sixty-two pounds in 1840, and showing an average of fifty-four pounds against fifty-three from 1821 to 1825. The next sixteen years (1841-1856), though, for cultivators, not so bad as from 1826 to 1833, was again a time of low prices; the Indian millet price varying from fifty-five in 1849 to 113 in 1855 and averaging eighty-four pounds against 103 from 1826 to 1833. These sixteen years were in

[1] *Ahmedabad Indian-Millet Rupee Prices, 1813-1877.*

Periods.	Year.	Price.				
		Highest.		Lowest.		Average in Pounds.
		Year.	Pounds.	Year.	Pounds.	
Famine or Scarcity (4 years).	1813	...	...	...	...	16
	1814	...	...	...	...	25
	1820	...	...	...	...	23
	1877	...	...	...	...	32
First period (5 years) ...	1815 to 1819 ...	1815	42	1818	53	45
Second period (5 years) ...	1821 to 1825 ...	1825	46	1824	64	53
Third period (8 years) ...	1826 to 1833 ...	1826	81	1829, 1830	120	103
Fourth period (7 years) ...	1834 to 1840 ...	1834	39	1840	62	54
Fifth period (16 years) ...	1841 to 1856 ...	1849	55	1855	113	84
Sixth period (6 years) ...	1857 to 1862 ...	1861	46	1857, 1858	63	54
Seventh period (14 years) ...	1863 to 1876 ...	1864	16	1876	50	32
Seven periods (61 years) ...	1815-19 & 21-76 ...	1864	16	1829, 1830	120	62
Whole time (65 years) ...	1813 to 1877 ...	1813, 1864	16	Do.	120	60

Chapter V. Capital. Prices.

their turn followed by a time (1857-1862) of moderate prices, the returns for the staple varying from forty-six in 1861 to sixty-three in 1857 and 1858 and averaging as before fifty-four pounds. The next and the remaining fourteen years (1863-1876) was a time of very high prices, the staple selling at from sixteen in 1864 to fifty in 1876 and giving an average of but thirty-two pounds. Lastly, the year 1877 was a time of very high prices, chiefly owing to the demand in the famine-stricken Deccan and Southern Marátha Country districts.

Ahmedabad Produce Prices,[1] *1813 - 1877.*

Produce.	Scarcity		First Period (1815-1819.)					Scarcity.	Second Period (1821-1825.)					Third Period (1826-1833.)			
	1813.	1814.	1815.	1816.	1817.	1818.	1819.	1820.	1821.	1822.	1823.	1824.	1825.	1826.	1827.	1828.	1829.
Millet	25	14	30	38	35	40	35	18	29	36	42	...	...	...	...	...	...
Indian millet	16	25	42	44	44	53	44	23	53	50	53	64	46	81	90	100	120
Rice	21	40	53	49	60	62	71	44	57	71	89	30	20	24	26	30	38
Pulse	14	26	35	44	46	32	38	28	44	53	49	...	...	...	...	...	...
Wheat	...	...	...	...	...	...	...	...	...	...	...	26	32	40	46	64	55

Produce.	Third Period (1826-1833.)				Fourth Period (1834-1840.)							Fifth Period (1841-1856.)				
	1830.	1831.	1832.	1833.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.	1842.	1843.	1844.	1845.
Millet	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
Indian millet	120	114	114	87	39	51	50	58	60	56	62	75	84	102	86	80
Rice	38	30	28	20	20	27	24	27	20	22	23	30	27	37	33	36
Pulse	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wheat	55	64	66	45	25	36	43	40	44	32	44	37	54	70	62	54

Produce.	Fifth Period (1841-1856)—*continued.*											Sixth Period (1857-1862.)				
	1846.	1847.	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.
Millet	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37	40
Indian millet	62	70	84	55	88	108	70	70	85	113	107	63	63	52	51	46	48
Rice	27	26	26	24	23	26	27	27	28	26	26	25	21	19	15	15	15
Pulse	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22	20
Wheat	45	41	37	52	38	64	51	51	42	55	51	43	39	38	36	32	34

Produce.	Seventh Period (1863-1876.)														Scarcity
	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.
Millet	18	14	22	36	30	30	19	20	25	32	37	46	49	42	35
Indian millet	22	16	26	36	31	34	19	19	29	34	40	42	48	50	32
Rice	11	13	12	12	15	13	13	13	19	19	20	22	26	22	18
Pulse	19	11	8	13	16	18	13	14	22	15	18	20	30	38	24
Wheat	17	13	11	16	22	16	14	15	19	20	26	29	36	34	24

1 This statement is prepared—i, from the Dholka Survey Report, dated 31st December 1825 in Bom. Gov. Sel. XI. 18, containing information for the years from 1813 to 1823; ii, from the Collector's special return containing figures for the years from 1824 to 1863, prepared for the price committee of 1863; iii, from a special return prepared in the Bombay Secretariat for the years from 1864 to 1874; iv, from the Administration Reports for the subsequent years. Millet is *bájri*, Penicillaria spicata; Indian millet, *juvár*, Sorghum vulgare and pulse, *tuver*, Cajanus indicus.

Chapter V.
Capital.

The details of weights and measures given at page 65 of the Kaira Statistical Account apply to Ahmedabad. There was a great diversity of weights up to July 1847 when the Company's rupee of 180 grains troy was made the unit of a *tola* and eighty such *tolás* were fixed as equal to one Indian *ser*. For the sake of convenience the people called the 80 Rupees' *ser* a *paka*, old *ser* about equal to one-half of this a *kacha ser*.

General Remarks.

Generally speaking, it may be said that the tendency of late years has been from wages in kind to wages in cash, and from employment by time to piece-work. The latter transition is itself only a reversion to more primitive custom. The former may be partly occasioned by the introduction of an adequate currency, but it is also one of many indications that the former intimate relations between master and servant, epecially in the rural districts, are degenerating into the baldest contract. In those more conservative parts, where payment in kind is most practised, there linger vestiges of the past state of things. Slaves still exist, though in name only, in the persons of the *Khavás* or domestic servitors in the households of the chief Rajputs or *Girásia* landowners. Lower down in the social scale the Parántij landholder still considers his servant as a member of his family, feeds him, clothes him, helps him to bear the expenses of any domestic ceremony, and sometimes even undertakes to provide him with a wife. In that part of the district at least, an old farm-servant is in a distinctly better position for raising a loan than his other neighbours, because it is understood that his employer will in case of necessity become security for him and thus enable him to command terms as easy as he could obtain himself. On the other hand in the rural tracts between Dholera and Viramgám, most of the reaping is done by bands of foreign Márvádis, from whom the people hold aloof in private intercourse, and who having carried out their bargain pass on and are seen no more. Between these two extremes the relations between employer and employed are to be found in this district in every stage of transition.

State of Labourers.

In the northern portion of the district the labouring classes, composed almost entirely of Bhils and Thákaria Kolis, remain in a very degraded condition owing to their drinking habits and their general physical and mental inferiority. Most of them spend the little money they may receive at the end of the cultivating season in buying spirits, and even the more thrifty are in the hot weather reduced to ekeing out a bare subsistence by watching fruit trees, gathering fuel, and picking wild berries. In the rest of the district the labouring classes, consisting chiefly of Rajputs and Talabda Kolis, have unequivocally progressed in material comfort. The Honourable Mr. Elphinstone within a few years after the cession of Ahmedabad remarked this tendency under British rule, and it has received a great impetus in more recent times. An interesting illustration of this is to be found in the fact that in the western villages the staple diet even of the lowest is usually wheat whereas up to 1863 it was usually millet, *bájri* or *juvár*. Elsewhere larger entertainments and gayer dress at holiday time, specially on the children are clear signs of a similar

Chapter V.
Capital.
State of Labourers.

change. The causes of this enhanced prosperity may be thus briefly summarized. (1) The more independent position secured to the labouring classes by law enables them to dispose of their services more advantageously to themselves.[1] Migration has enormously increased. It is computed that the port of Dholera alone draws to itself every year during the busy season two thousand able-bodied men, who return to their families and their fields as soon as the time for cultivation approaches. Others resort at the same period to Ahmedabad, Viramgám, Bhávnagar, and other centres, thereby benefiting both themselves and their less energetic fellows, who remain behind to repair houses against the rains, protect and pick fruit, collect fuel, and so on. (2) The increase in the area under cultivation has led to a demand on the part of the Kanbi for more hired labour to enable him to work his larger holding. (3) The extension of trade and of steam mill enterprize. It is true that in Gogha, Dholka, and other places, which have only partially shared in the modern revival of trade, many Musalmán women have suffered much, as work in their own homes such as spinning yarn is the only means of livelihood permitted to them by custom. Against this however may be set the increase in remunerative home labour in the cotton districts where even Bráhman and Vánia women unhusk cotton and do other light work. The Dheds too have been to a great extent ousted by machine-made cloth from their occupation of weaving. As there is a prejudice against employing these people on regular field work, and as the operatives in the steam mills and similar establishments refuse to associate with them they would have been hard pressed but for (4) the extension of railway, local funds, and other public works, which give employment to large numbers of unskilled labourers of various castes. These ranks are swelled in the open season by gangs of Márvádis who mostly return to their country before the rains, but many who moved into the district during the famine of 1869 have settled as permanent residents.

[1] Mr. Dunlop in his *jamábandi* report for 1819 notes that 'the Kolis of Báyad in Parántij are all slaves to the Patels, their ancestors having sold themselves during a famine.' All trace of this has disappeared and some of the sons of these 'slaves' now make their way as far as Bhávnagar for employment in the open season.

CHAPTER VI.

TRADE AND MANUFACTURES.

SECTION I.—TRADE.[1]

Chapter VI. Trade. Roads.

During Native rule, and for fifty years after its fall, nothing was done to improve land communications. At the end of the first half of the present century, the only made road outside of the city and cantonment, was about two miles at the approach, from the landward, to the town of Gogha. The only bridges were, one over a creek near Dholera and another across a lake at Viramgám. In light soils, the main routes, pulverized by constant traffic into deep fine sand, were heavy during the fair season and firm in the rains. Except for chance floods they were always passable to the broad-wheeled country carts,[2] to the pack bullocks of roving Vanjárás, and to camels from Márwár and the north. On the other hand, during the rains, black soil tracks were practically closed to wheeled vehicles. Its plastic loam retaining while moist the impression of every step, became hardened by the dry weather into iron-like ruts and holes tolerable only after the season was well advanced.[3]

1850-1877.

Since 1850 both from general and local funds large sums have been spent on roads, and though from the want of metal much has still to be done, considerable progress has been made. The first work, both in point of time and of size, was intended to be a military and trade highway across the district from the port of Gogha by Dhandhuka and Bávla to Ahmedabad, and thence to Kinádi through Samera. Of the original design a total length of 162 miles, from Gogha as far as Harsol, was completed. Besides the main line, a branch from Sarkhej to Viramgám a distance of thirty miles, was afterwards made from the one per cent Income Tax allotment. This branch was opened in 1865-66, and cost in all £22,642 (Rs. 2,26,420). But owing to the decay of Gogha trade and the construction of the Wadhwán extension of the Bombay and Baroda railway, traffic has greatly deserted it, and the trunk-road is no longer kept in its original order. From Gogha to Tagdi, fifty-eight miles, it is

---

1 The materials for this section have been in great part supplied, and much of the section is written by Mr. F. S. P. Lely, C.S.

2 Mr. Vibart in 1830 estimated the number of carts in the district at 16,178. Mr. Fawcett in 1849 made the number 18,534. The total shown in the returns for 1876-77 was 22,012.

3 Collector 170, 30th December 1844.

Chapter VI. Trade. Roads.

well metalled, and except at three rivers unbroken. But from Tagdi to Bávla, forty-eight miles, so much damage was done by floods in 1866 and subsequent years, that seven miles between Tagdi and Dhandhuka are unbridged, unmetalled, and only partially banked, while the section between Dhandhuka and Bávla has fallen into complete disrepair. From Gogha to Dhandhuka the annual outlay is met from Government grants. But from Bávla to Ahmedabad the expense is borne by local funds. This section of the road is bridged throughout, and metalled with broken bricks and lime gravel. The Ahmedabad and Harsol section, thirty-eight miles long, kept up from Government funds, is bridged for two-thirds of its course but not metalled. Part of the Viramgám branch was used for the Wadhwán railway; the rest bridged and embanked, is still kept up at the expense of local funds, chiefly for the convenience of the town of Sánand.

From local funds, with in some cases the aid of municipal and other grants, many minor roads have been made; the more important towns and villages have been connected by cleared and fairly well-kept lines, and a network of tracks is passable for country vehicles. Of made roads the following are the chief: from the Ahmedabad railway station to the cantonment, one and a half miles; from the Ahmedabad Delhi gate to the Dudheshvar burning ground, 5860 feet; from the A'stodiya gate to the Ráypur gate and thence to the south bank of the Kánkariya lake, 7400 feet; from the Kánkariya lake to Sháh A'lam and thence to the A'stodiya gate, 10,464 feet; from the A'stodiya gate to Saraspur and thence back to the Kálupur gate, 13,616; metalled roads in the railway suburb, 9080; from the Jamálpur gate to the Sapt Rishi A'ro, 3200; from the railway station to the town of Sánand and thence to the old Viramgám road, about 2¼ miles; from the railway station to the Bharvári and the Golvári gates of Viramgám, 1080 and 1845 feet respectively; and from the Rahiápuri gate of Viramgám to the railway crossing, 3175 feet. Of regularly repaired cross country roads there are: from Ahmedabad to Kuha on the way to Kapadvanj, fifteen miles, bridged throughout; from Ahmedabad to Dholka as far as Navápura, fourteen miles, banked and bridged throughout; from Dholka to Saroda, eight miles; from Dholka to Bávla, ten miles; from Dholka to Sahij on the way to Kaira, five miles; from Dhandhuka to Ránpur, eighteen miles; from Ránpur to Barvála, eighteen miles; from Khas to Bhimnáth, fourteen miles; from Gogha to Mahuva, twenty-two miles; from Gogha to Vadla, four miles; from Tagdi to Ukherla, six miles; from Naroda to Valád and Parántij to Piplodi on the way to Idar, forty-one miles; from Parántij to Harsol, twelve miles; from Mándal to Jhund railway station, nine miles; and from Rámpura to Dekváda, five miles. Altogether there are now (1878) in the district 373 miles of made roads.

Tolls.

The Gogha, Bávla, Ahmedabad, and Harsol high road costs for yearly ordinary repairs an average sum of £2400 (Rs. 24,000). Upon it, between Vala and Vartej is a toll that during the five years ending 1877, yielded an average revenue of £309 (Rs. 3090). This is the only direct revenue raised on roads in the district. Formerly

there were toll-houses at Viramgám, Sánand, and Sarkhej, but all three have been abolished, the first on the appropriation of its site for the railway, the second in 1872, and the third in 1873.

Bridges.

The chief bridge in the district carries the Wadhwán extension of the Bombay and Baroda railway over the Sábarmati.[1] It stands on the site of the former bridge destroyed in the 1875 flood. It is formed of the same class of girders, but is eight feet higher, and contains four additional spans which make up its total length to twenty-two spans of sixty-two feet six inches each. It consists of piers of four columns founded at a depth of from thirty-one feet six inches to fifty-four feet under the bed of the river strengthened on top by a covering girder, and braced throughout. The piers in the deep water are all formed of columns three feet in diameter and 1¼ inches thick, protected by wooden booms on the up stream side, and ten of them plated on the same side with quarter inch thick wrought iron. There are cluster piers at every 300 feet. This new bridge, begun on the 1st December 1875, was, at a cost of £59,500 (Rs. 5,95,000), opened for traffic on the 18th May following. A brick masonry bridge of nine thirty-feet spans over the river Meshva at Harsol was completed in 1869 at a cost of £4082 (Rs. 40,820). It is the chief work on that section of the Ahmedabad and Samera road. An iron girder bridge of nine thirty-feet spans with planked roadway across the river Bhogáva at Phedra was finished in March 1866. The total cost, £4256 (Rs. 42,560), was met from the Dholera charitable fund which realizes by tolls an average yearly revenue of £382 (Rs. 3820).

Rest houses.

Collector's houses have been built at Gogha, Barvála, Dhandhuka, Ránpur, Dholka, Bávla, Bagodra, Parántij, and Modása.[2] Rest-houses for European travellers are kept up in the city of Ahmedabad, at Sánand, at Gogha, at Harsol, and at Viramgám. Except the Gogha rest-house, which is paid for from provincial funds, all of these are supported by local funds. Rest-houses for native travellers number in all 159, of which forty-nine are kept in repair out of local funds or similar public sources, and 110 by private individuals or bodies. Most of the latter are intended primarily for caste purposes, and are only available for the accommodation of outsiders when not otherwise in use.

Fords and Ferries.

In the upper part of its course, except near the junction of the river Háthmati where it is crossed by the Bijápur road, the Sábarmati on account of its steep and rugged banks cannot be passed by carts. After entering Daskroi, though its broad sandy bed is always trying to cattle, it may during the dry weather be crossed in many places above the influence of the tide. Always difficult from its deep mud, and sometimes dangerous from the sudden rising of the tide, most of the traffic across the Bhogáva goes over

---

1 The details of the Sábarmati railway bridge have been communicated by Mr. J. R. Hargrave, C.E.

2 These houses are for the use of all public officers subject to the prior right of the Collector and of his assistant in charge of the particular sub-division.

Chapter VI. Trade.

the Phedra bridge. With these two exceptions, all the district rivers, save when in flood, can be passed without risk. No ferries ply throughout the year. During the rainy season nine are let out in farm, at Sháhibág, Varáj, Navápura, Bárádari, and Behrámpur in Daskroi, and at Sahij, Kingoli, Vautha, and Bholád in Dholka. These, in 1878, yielded a revenue of £321 (Rs. 3210), out of which an inspector of boats was entertained on a monthly salary of £1 5*s.* (Rs. 12-8). Since, in 1875, the Ellis bridge at Ahmedabad was carried away, passenger boats have plied across the Sábarmati.

Vessels.

A few small sailing boats, *machhvás*, ply for local trade both at Dholera and at Gogha, but distant ventures are made only in the larger craft known as *padávs* and *batelás*. These in all essential particulars are the same as those described in the Broach Statistical Account.[1] Most of them are built in Bilimora and Daman, the want of home-grown timber preventing ship-building at Dholera. In Gogha ship-building was formerly a thriving industry, but since the decline of the port, the builders have gone, most of them to Bombay. Except a few that belong to local merchants, these vessels are the property of the captains or *tandels*. They are manned by natives of Gogha, Broach, Surat, Bilimora, and Bulsár. The ordinary freight for cotton to Bombay from Dholera is from 1*s.* 6*d.* to 2*s.* 6*d.* (12 *annas* - Rs. 1¼) the half-pressed bale in the early part of the season (October-November), rising as high as from 4*s.* to 5*s.* (Rs. 2 - Rs. 2½) towards its close (April - May).

Light-houses.

The chief light house is on Piram island. In 1830 Commodore Grant of the Indian Navy brought to the notice of Government, that though to those who knew the coast it was safe enough during the day, its reefs and strong tides made Piram most dangerous at night. To avoid the risk, in the early part of the season, sailors kept close to the eastern shore. But in April and May the strong surf from the south forced them to make for the west, and, at that season, near Piram, losses were common. In his opinion, with a light-house on the island, the western coast would be as safe by night as by day. Accordingly, out of the ruins of the old fort, a tower twenty-six feet high was built, and on it a sixty-feet spar with an eight-burner lantern was raised. This arrangement was continued till, in February 1864, a new building was begun, and, at a cost of £563 (Rs. 5630), finished in March 1865. It is a brick tower, from base to vane 77 feet 9 inches high, enclosing a spiral stone staircase and showing a single fixed white dioptric light of order four, in clear weather visible for twenty miles from the deck of a ship. The height of the centre of the lantern above high water is 100 feet and its area of illumination 288° of the horizon. The light-house is, under the supervision of the Collector of Salt Revenue, in charge of a guard of six native seamen at a monthly cost of £8 4*s.* (Rs. 82) met from port dues. Since 1856 the north-east angle of the town of Gogha, in north lat. 21° 40′ 30″ and east long. 72° 16′, has been provided with a single fixed white light in clear weather visible for ten miles; and

[1] Bom. Gazetteer, II. 414-416.

Chapter VI. Trade.

since the same time the entrance of the Dholera creek, in north lat. 22° 3′ 20′ and east long. 72° 17′ 30″, has from September 1st to June 15th been provided with a common lantern with five oil burners and reflectors fixed in a conical building on wooden piles. The centre of the lantern is fifty feet above high water, and in clear weather is visible for fifteen miles.[1]

Post Offices.

Except the Dhandhuka and Gogha sub-divisions[2] included in the Káthiáwár division, for postal purposes the Ahmedabad district forms a part of the Ahmedabad postal division. It contains together with three receiving offices, two in the city and one at the railway station, fifteen post offices located at the following stations : Ahmedabad city, Sarkhej, Cantonment, Parántij, Modása, Harsol, Sánand, Viramgám, Mándal, Pátri, Khárághoda, Dholka, Koth, Bávla, and Rámpura. These offices are supervised by the inspector of post offices in the Ahmedabad division, assisted by a sub-inspector. Except at Ahmedabad city, Harsol, Koth, and Rámpura, the officials in charge of post offices are styled deputy post-masters and are paid yearly salaries varying from £14 8*s.* to £60 (Rs. 144 - Rs. 600) and averaging £36 12*s.* 4*d.* (Rs. 366-2-8). The officials at Koth and Rámpura styled sub-deputy post-masters draw each an annual salary of £12 (Rs. 120) ; and the official at Harsol styled a post *kárkun*, draws an annual salary of £14 8*s.* (Rs. 144). As the Ahmedabad city station is the disbursing office of the district, the officer in charge is styled post-master and draws a yearly salary of £180 rising to £240 (Rs. 1800 - Rs. 2400). From the stations mentioned above, letters are distributed by delivery peons or by post runners. For this additional work the latter are paid a trifling gratuity. The correspondence for surrounding villages is delivered by rural messengers, who also bring into the stations letters posted in letter-boxes placed at several villages in each sub-division. The rural messengers carry with them a stock of postage stamps for sale at the villages they visit. In this district there are in all thirty-seven delivery peons on yearly salaries ranging from £9 12*s.* to £12 (Rs. 96 - Rs. 120) and averaging £9 19*s.* 9⅜*d.* (Rs. 99-14-3). Of the thirty-six rural messengers, ten are paid from the Imperial and twenty-six from the provincial revenues; of the ten, nine draw each a yearly salary of £10 16*s.* (Rs. 108) and the tenth, £9 12*s.* (Rs. 96) ; while of the twenty-six, half the number are paid each £9 12*s.* (Rs. 96) and the rest each £12 (Rs. 120) a year ; this whole staff of rural messengers is distributed according to requirements, letters being delivered in some places daily and in others only once a week. Besides the horse *dák* line, between Ahmedabad and Pátan by Kálol and Mesána, there are in the district eighteen foot lines. For their maintenance in 1877 the horse-line, which also carries the Sind and Rajputána mails, cost £1132 16*s.* (Rs. 11,328) and the foot-lines £1084 (Rs. 10,840) or a total sum of £2216 16*s.* (Rs. 22,168). Exclusive of the sale proceeds of post-stamps, the

---

1 List of light-houses published by the Marine Survey Department, Calcutta, 1876.

2 The post offices at Dhandhuka, Dholera, Ránpur, Barvála, and Gogha, though within the Ahmedabad district, are in the postal division of Káthiáwár.

Chapter VI. — Trade.

postal revenue of the district amounted in 1876-77 to £2814 (Rs. 28,140) and the expenditure to £4671 (Rs. 46,710); of these £4353 (Rs. 43,530) were debited to Imperial and £318 (Rs. 3180) to provincial funds.

Though the practice of keeping a register of letters and other post-articles delivered and despatched has been, since the introduction of the new post-manual (1873), discontinued, a memorandum was, as an experiment, kept in 1877, showing the number of letters and other articles delivered from some of the post offices in the district. Compared with the returns for 1870, this memorandum shows for some post offices a considerable increase; at Ahmedabad camp, 17,109 to 75,322; at Barvála, 421 to 43,732; Dholka, 52,954 to 72,722; Modása, 14,188 to 28,366; Parántij, 41,698 to 80,028; and Viramgám, 17,109 to 199,472. On the other hand the Dholera returns show a falling off from 107,984 to 97,292 and those for the Ahmedabad city from 768,285 to 703,066.[1]

Telegraph.

Besides the railway telegraph offices at the thirteen railway stations, there are at present (1878) two Government telegraph offices, one at Ahmedabad and the other at Dholera. The total number of messages of all kinds was at Ahmedabad 20,715 and at Dholera 9190.

Course of Trade. *Hindu Period, 750-1300.*

We know that under the strong rule of the Anhilváda dynasties (746-1297), the primeval forest, from the hills of Modása to the mouth of the Sábarmati and the shore of the Ran, was gradually converted into cultivated fields studded with populous and wealthy towns, the very existence of which implied the growth of considerable trade. Though the poetic annalists of those times occasionally mention ships and merchants,[2] they give no details especially relating to the country included in the modern district of Ahmedabad. Of those ports which were the great gateways of classic Gujar-land not one lay within its limited coast-line. Its chief inland mart was probably Dholka.[3] But during this period there had been growing up at Gogha, under the patronage of the Pátan kings, a race of hardy Káscars, whose prowess enabled

[1] *Ahmedabad Post Details, 1870 and 1877.*

Station.	1870.	1877.	Station.	1870.	1877.
Ahmedabad City	768,285	703,066	Harsol	1821	...
Do. Camp	17,109	75,322	Mándal	6149	...
Báreja	457	...	Modása	14,188	28,366
Barvála	421	43,732	Parántij	41,698	80,028
Dhandhuka	50,445	53,144	Sánand	23,829	...
Dholka	52,954	72,722	Sarkhej	672	...
Dholera...	107,984	97,292	Viramgám	17,109	199,472
Gogha	39,222	44,710	Pátri	...	61,438

[2] Rás Mála, Vol. I. 245.

[3] Al Idrisi (1150) speaks of Dulaka, Asával, and a third town Hanával near Asával, as places of good trade about equal in size. Elliot's History of India, I. 87. Dulaka is Dholka, Asával was on the site of Ahmedabad, and Hanával or Janával is perhaps Sihor, the chief town of the Chanval or Chuvál, which, in 1825, might still be distinctly traced and from whose ruins, ornaments and gigantic bricks had been dug. Bom. Gov. Sel. X. 75.

Chapter VI. Trade.

Mokhráji Gohel, in the fourteenth century, to levy black-mail from his stronghold in the island of Piram, on all that entered the Gulf of Cambay. His power, nevertheless, was but shortlived. The new Muhammadan masters of the province slew him in battle (1347), destroyed his fort, and converted a population of pirates into peaceable but not less skilful and daring merchant seamen. Other circumstances concurred about this time to increase the importance of their native place. Its roadstead was the best in the Gulf. The neighbouring creek of Gundi which had hitherto appropriated most of the local trade began to silt up. Lastly when (1411) the city of Ahmad Sháh arose on the other side of the Gulf, Gogha became closely associated with its growing splendour, as all larger vessels came to anchor in its deeper waters, and there discharged their cargoes into smaller craft for transmission to Cambay whence they were carried by land to the capital. Thus in the fifteenth century, after a lengthened interlude of disorder and insecurity, the district entered upon a new era of commercial prosperity, the focus being transferred from the banks of the Sarasvati to the banks of the Sábarmati. The new capital was the heart of the great kingdom of Gujarát which, says Barbosa, had 'many cities and towns in the interior and very much shipping and many merchants and shipowners, both Moors and Gentiles.'[1] From the land-ward side came into Ahmedabad the opium of Málwa, horses, arms, and silken stuffs from Khorásán, and indigo, tobacco, cotton and grain from nearer homē, to be bartered for foreign imports and local manufactures. Out of the city flowed a great stream of traffic southward to the ancient entrepôt of Dholka where much fine cloth was woven by settlers who, according to a local story, had been driven by want from Rádhanpur. Here a small offshoot diverged into Káthiáwár, but the main current passed on to Cambay, whither were brought by sea from every part of the eastern world the luxuries demanded by a splendid court and a voluptuous nobility.[2]

Ahmedabad Kings, 1400-1570.

Before the beginning of the sixteenth century the silks, brocades, and cotton cloths of Ahmedabad, generally bearing the name of Cambay their place of shipment, were in demand in every eastern market from Cairo to Pekin. The wild tribesman of the Malayan archipelago did not consider his freedom secured until he had stored up a pile of them, equal in height to himself, since that was the standard ransom of a captive in the frays in which he was constantly engaged.[3] On the coast of Africa they were exchanged for gold often at a hundred times their real value.[4] 'To Aden,' says Barbosa, 'come ships of Cambay so many and so large and with so much merchandize for transport to the Arabian, Abyssinian, and Egyptian markets that it is a terrible thing to think of so great an expenditure of cotton stuffs as they bring.' These goods with

1 Stanley's Barbosa, 50.

2 The Gujarát Moors are (1513) luxurious people who live well and spend much money. They are very well dressed and their women richly decked out. Stanley's Barbosa, 50.

3 Stanley's Barbosa, 200.

4 Stanley's Barbosa, 5, 7

Chapter VI.
Trade.

some quantity of drugs, opium, wheat, indigo, and beads appear to have formed the staple exports, in exchange for which were brought back copper, quicksilver, vermilion, and rose-water from Aden; horses from Arabia; gold, ivory, amber, and wax from the east coast of Africa; areca, cocoanuts, and pepper from Malabar, Ceylon and Pegu; sugar and muslins from Bengal; jewels and musk from Ava; spices and China produce from the great emporium of Malacca. The early Portuguese accounts agree well with Barbosa, bearing ample testimony to the commercial predominance of the 'great kingdom of Cambay,' and its capital Ahmedabad. Its merchants were their keenest rivals; its merchantmen their richest prizes. In the Moluccas, on the Malabar coast, and at the gold mines of Sofala, the Muhammadan subjects of 'the king of Gujarát' were found glutting the markets with their goods, combining to force up the prices of country produce, and sometimes even stirring up the Native governments and populace to drive out the Europeans.[1] This collision of interests gave the first shock to the trade of Ahmedabad. Not only did the Portuguese, whose commanding position was finally established by their success at Diu (1538), close the Red Sea against Muhammadan ships, but their supremacy at sea made even the Gulf of Cambay as unsafe to their rivals as in the days before the Gohel had been driven from Piram (1347). In vain did the Gogha sailors try to avoid Portuguese cruisers by keeping out to sea and passing on their way to Malacca and Sumatra through the Maldive Islands to the south of Ceylon.[2] Their rich cargoes fell a prey to the European at every point, and in 1531 Saldana, penetrating to Gogha itself, destroyed the town together with fifteen of the largest prows laden with spices.[3] More disastrous still was the decline of the power of the Ahmedabad kings. In the middle of the sixteenth century anarchy prevailed throughout the country 'and every species of injustice and oppression was introduced.'[4]

Moghal Viceroys, 1570-1700.

The strong hand of Akbar promptly quelled, though he could not prevent, rebellions, restored security to property, and abolished transit duties on all articles in common use. About fifteen years after his conquest, the traveller Cæsar Frederick (1588) declares that, if he had not seen it, he could not have believed that the trade of Ahmedabad and Cambay was so great.[5] At the beginning of the seventeenth century, though public order was very loosely maintained, and, especially in the north of Gujarát, 'were large tracts full of thievish beastly men and savage beasts,'[6] two hundred carts richly laden with merchandize left the capital almost every ten days for export by sea.[7] In 1638 the traveller Mandelslo found great convenience of traffic at Ahmedabad. Except in gunpowder, lead, and saltpetre, for which a licence was wanted, strangers were free to trade in any article. The only customs duty

1 Kerr's Voyages, II. 410, 414, 575; VIII. 445.
2 Kerr's Voyages, VI. 91.
3 Kerr's Voyages, VI. 223.
4 Bird's Mirát-i-Ahmadi, 303-406.
5 Forbes' Or. Mem. III. 86.
6 Nicholas Ufflet in Kerr, VIII. 302.
7 Kerr's Voyages, VIII. 302.

Chapter VI. Trade.

was a charge of fifteen pence on every wagon, and the Vániás' correspondents in all parts of Asia and even in Constantinople made exchange easy and advantageous.[1] There was scarcely any nation or merchandize in all Asia not to be found in Ahmedabad.[2] In 1666 Thevenot found great exports of indigo, sugared and raw ginger, sugar, cumin, lac, myrobalans, tamarinds, opium, saltpetre, and honey; and besides supplies of cotton fabrics from Láhor and Delhi, a great local manufacture of satins, velvets, taffetas, silks and cloth of gold and wool.[3]

18th Century. *Decline of Trade.*

Towards the close of the seventeenth century trade began to leave Ahmedabad. The head of the Cambay Gulf was silting up, and Surat near the mouth of the Tápti, specially favoured as the port for Mecca pilgrims and enriched by English and Dutch commerce, was drawing to itself the chief trade of the province. This change Ahmedabad never recovered, and from that time till the establishment of British rule (1818) the trade of the district continued to decline. During this period scores of once prosperous villages, alike on the borders of Káthiáwár[4] and under the walls of Ahmedabad,[5] were deserted. At a distance from the larger towns the trader was only tolerated by the Kolis on one side as a convenient agent for the disposal of stolen property, and by the Girásiás on the other because he brought opium and cloth and paid blackmail. The trade routes were clogged by transit-duty stations, and exposed to the attacks of robber gangs, who roamed about with little check, save from a few military leaders who gave partial protection as a means of increasing their own consequence. Special importance as a trade-centre only drew upon a place special exactions. In Ahmedabad,[6] the town duties in the best days of Muhammadan rule were fixed for Musalmáns, at two and a half per cent on the value of the goods, and at five per cent for Hindus. These were constantly raised as the necessities of the rulers grew more pressing. They reached a climax, when, in 1755, the Peshwa and the Gáikwár divided the city revenues between them. Each Government collected its share by its own agents and kept constantly introducing

---

[1] Harris' Travels, II. 114.

[2] But this traveller also repeatedly refers to the dangerous state of the country and especially the great roads owing to the excesses of the "Rasbouts" (Rajputs) with whom the Imperial Governor was said to be in league.

[3] Thevenot's Voyages, V. 35. Of the articles mentioned, those for which Ahmedabad seems at this time to have been specially famous, were indigo, ginger, sugar, and silk carpets. The Sarkhej indigo was (1638) the best in the province (Mandelslo in Harris, II. 126 and Tavernier (1680) in Harris, II. 373). Ginger grew (1680) in greater quantity in Ahmedabad than in any part of Asia. 'Tis hardly to be imagined how much was transported candied into foreign ports' (Tavernier, ditto). Of loaf sugar Tavernier says (ditto) 'they had the perfect art of refining it.' He also in the same place mentions specially the silk carpets mixed with silver and gold. Of other fabrics Mandelslo speaks of a vast manufactory of silk and calicoes and of gold and silver brocades, though these were slighter and at the same time dearer than those from China. When he was in Ahmédabad a new kind of stuff, of silk and cotton with gold flowers, was invented and sold at a cost of five crowns the yard (Harris, II. 114).

[4] Information by Bhagvándás Náthji, Desái of Dhandhuka, 1802. Gov. 18th April 1806.

[5] Report on Daskroi by the Assistant Collector Mr. Williamson, 31st August 1819.

[6] The details that follow have been obtained chiefly from reports by Mr. Dunlop, the first Collector of Ahmedabad, and from other papers in the Collector's Records.

Chapter VI.
Trade.
18th Century.
Decline of Trade.

fresh exactions. A system of rates, intentionally complicated and kept secret, drove the merchant to purchase the aid of experts or *márphatiás*, who, often in league with the managers, played their employers false. Manufactured silk before it left the city gates had already paid a full fourth of its selling value, and the average burden on other manufactured exports was estimated at twenty per cent. Not a bunch of plantains could be sold except by farmers who had bought the right and who were able to charge what prices they chose. Upon every wretched bundle of firewood or basket of garden stuff, if its sale was not engrossed by monopolists, was levied a duty of fifteen to twenty-five per cent on entrance, a handful as the gate-keeper's private douceur, and another handful to a minor farmer at every guard-room on its way to the market.[1] Nor was it sufficient for the merchant to satisfy the demands of the Government. All or nearly all goods that entered the municipal weighing-yard, *kotha*, were set upon by the agents of favoured individuals or religious institutions who based their claims to exact small specified charges ostensibly upon the original consent of the traders themselves, but really on the support given to their claims by the Native Government. The Nagarseth, or chief of the merchants, received an *ad-valorem* fee of a quarter per cent; a descendant of a former minister took ⅜ per cent, and under the name of religion twenty-five Hindu temples shared the spoil with forty Bháts, Vairágis, and other beggars.[2] Indeed the sum total of these and similar levies was too high for practical collection, and it was a common practice for merchants to warehouse their goods at Kadi, Pethápur, and other places close by and, by threatening to send them to some other market, to force the farmers to let them into the city at lower rates. Even with this alleviation, the burdens upon trade were too heavy to be borne. 'In this city,' says Mr. Forbes in 1781, 'commerce once met with every encouragement. It was the resort of merchants, artists, and travellers of every description. It now exhibits solitude, poverty, and desolation.'[3] Thirty-six years afterwards when Mr. Dunlop, the first British Collector, entered within the broken walls of the once magnificent capital, he found it 'a melancholy picture of ruins.'[4]

Of the sea-borne trade by Cambay at the end of the eighteenth

---

1 These officials were called *Darváns* in Ahmedabad and *Mirdás* in Dholka.

2 The number and claims of these recipients seem to have been varying and the British officers, after their occupation of the city, found some difficulty in ascertaining the exact truth. According to a report by Mr. Dunlop, dated 10th May 1821, twenty-two temples and thirty-four individuals were each entitled to a small charge under the head *kotha* consisting in almost every instance of from ⅜*d.* to 10½*d.* on every £100 (Rs. 1000) worth of piece goods. Besides this, he says, collections under the head of *sáyar* were claimed by thirty-one temples and thirty-four individuals on molasses, cotton, grain, tobacco, and oil. Certain temples were allowed to pass every year free of duty for their own use specified quantities of merchandize. Thus the Shri Rámji temple enjoyed this privilege with respect to twelve bundles of betel leaf, 113 *mans* of clarified butter, and 1300 *tolás* of gold wire. Similarly among the individuals some claimed the right of levying a small percentage on certain goods, and others the right of passing a certain quantity of clarified butter free of duty.

3 Forbes' Or. Mem. III. 120.

4 Report to Government, December 1817.

Chapter VI.
Trade.

century little or nothing remained except occasional shipments of salt, cotton, and other agricultural produce, from the western districts to the ports lower down the coast.[1] Left to herself Gogha fell a prey to successive adventurers, and even after she became nominally subject to the Peshwa, his administration in so remote a place was too weak to counteract the great local influence of the Rával of Bhávnagar, who spared no pains to draw all the trade that still lingered on that side of the Gulf to his own newly-founded capital.[2] Thus the workhouses of Gogha were deserted and its famous seamen had, by the beginning of the nineteenth century, become 'only a shadow of what they once were.'[3]

1802-1830.
Dholera.

With the present century a new era opened. On the 6th June 1802 the Bombay Government having accepted the cession of a small estate at the head of the Gulf of Cambay, hoisted the British flag at its chief place, Dholera. About twenty years earlier, in consequence of the quarrels of its Girásia proprietors, Dholera had been nearly deserted. At the time of transfer it consisted of about 300 houses inhabited by a few families, 'who in fear and trembling cultivated just enough to enable them to live.'[4] Its natural advantages were great. Its creek was broad and deep enough for native vessels of from 107 to 143 tons (300 to 400 *khándis*). It was the most convenient outlet of a country which produced more wheat than its people could reap,[5] and which has since become one of the chief cotton fields in India. Up to this time trade had been driven away by the lawless feuds of the Girásia lords, and by the jealous tactics of the Rával of Bhávnagar,[6] whose position enabled him to command the creek. But it was confidently predicted that in the strong hands of the Company a port would speedily arise which would supplant Bhávnagar, as Bhávnagar had supplanted Gogha. The fates, however, were at first unkind. The Bhávnagar chief, in order to checkmate the action of the Girásiás in placing themselves under British protection, opened a rival port on the adjacent creek of Sindrái,[7] and by means of a low scale of duties succeeded in attracting the chief share of the harvests of Dhandhuka and Ránpur. Further, in 1806, a discontented Girásia faction set fire to the new settlement and completely gutted every dwelling and workshop. Two years later, confidence was again shaken by an attack on the neighbouring village of Bhávnagar, the merchants declaring that unless they were better protected they would take their cotton to some other port. The lawless state of the interior was a still greater bar

---

1 Forbes' Or. Mem. III. 87 and Hové's Tours, Bom. Gov. Sel. XVI. 49, 67 and 84.

2 Lieutenant Robertson to Collector of Kaira, 1st June 1806 and 26th September 1806.

3 Lieutenant Robertson to Collector of Kaira, 1st June 1806 and 26th September 1806.

4 Sir Miguel de Souza (1802) to Government on the proposed cession of Dholera. A few years later another officer wrote, 'Dholera is so well suited by nature for landing and loading merchandize that it cannot be improved by art. The heaviest goods are taken by carts within a few yards of the vessels and hoisted on board from a bank.' (Lieut. Ballantine to Mr. Diggle, 8th July 1808).

5 Mr. Byrom Rowles, 27th March 1806.

6 Mr. Holford, Resident at Cambay to Government, 1802.

7 Sir M. De Souza to Major Walker, 22nd June 1805.

Chapter VI.
Trade.
1802-1830.
Dholera.

to trade. Besides the Imperial customs-houses, there was, within the limits of each petty Girásiá's estate, a post for the collection of fees or *chila vera*, so that every cart of goods had to pay its way to the sea coast almost from village to village. Including the terminal town-dues a consignment of merchandize was mulcted on the sixteen miles from Dhandhuka at four different places; on the thirty-two miles from Limbdi at five by one route and at seven by another; on the thirty-eight miles from Dholka at eight by one route and at ten by the other. To these was added the fear of the Káthis, who had assumed a roving plunder-commission with such effect that, out of the Dholera dues, one-third was, under the sanction of the Company, paid to the chief of Jasdan for passports or policies of insurance against the attacks of his clansmen.[1] In spite of these hostile influences the Company's strong rule insured the gradual progress of the infant settlement. In 1810 their commercial agent at Surat began to buy and ship at Dholera part of his annual cotton investment; and in 1813 the increase of trade was most satisfactory.

The vexatious inland imposts above mentioned were forbidden by proclamation in 1817, and the same year also saw the cession of the city of Ahmedabad and the complete establishment of British supremacy throughout the district. From this time, begins an era of commercial activity varied in character and degree, but on the whole progressive.[2] At Dholera, the chief centre of trade, the customs revenue amounted in 1819 to £6000 (Rs. 60,000).[3] At the same time several dangers threatened the prosperity of the port. The river Bhádhar, whose stream formerly scoured the creek, forsook its course in 1812, and thus probably hastened the accumulation of silt which, by 1817, had so advanced, that navigation became so unsafe as to deter underwriters from accepting risks. Attention was in consequence directed to Bávliári a village about fifteen miles south of Dholera. There the anchorage was found to be 'perfectly safe for the largest ship,' and though the swampy nature of the ground prevented carts from reaching it till January, the drawback mattered little as it was after that month that the quicksands in the Dholera creek, and the bore at its mouth became most perilous. Accordingly, though with strong injunctions that trade should by no means be forced to it, Bávliári was established as a public port on the 1st February 1823. The new port was a success. In May 1823 its customs collections amounted to £438 (Rs. 4380), and in the same month four years later to £1189 (Rs. 11,890). Then the trade was nearly equally divided between it and the older port, Dholera getting the lion's share during the early part of the season when the

---

[1] This was commuted in 1817 into a fixed payment equal to the average of the past receipts. Other chiefs besides Jasdan received regular contributions from the merchants. Mr. Diggle estimated that in the Dholera sub-division alone £1900 (Rs. 19,000) a year were paid by the traders to petty chiefs nominally for protection, really for forbearance.

[2] The statements of external and internal commerce for 1819-20 forwarded by the Collector to the Reporter General on Commerce in Bombay show an increase in imports of £121,514 (Rs. 12,15,140) and a decrease in exports of £18,982 (Rs. 1,89,820) on the previous year. The decrease in exports was owing to the failure of the cotton crop.

[3] Mr. Dunlop to Government, 10th May 1820.

Chapter VI. Trade. 1802-1830.

road to Bávliári was closed, and Bávliári being almost the only resort of shipping in the later months when the prevailing south-west winds made the anchorage in the estuary of the Bhádhar impracticable. At the same time Dholera continued the common emporium. There building went on apace while not a single individual moved to Bávliári.[1]

Viramgám.

Dholera was at this time the terminus of a line of traffic that stretched as far north as Páli, the great Márwár trade centre. An incidental consequence of this was the first advance of Viramgám towards commercial importance. That place had hitherto been an ordinary market town[2] in the centre of a country harassed by predatory Kolis, and in spite of its natural fertility not producing grain enough for its own support.[3] It was now to reap the benefit of a strong rule. A Marátha *Galálpatti* or *Holi* red powder tax was applied to repairing the walls, and a timely use of force restored to order the robbers of the Chuvál. The result of these measures was soon apparent. Situated at the meeting of now unmolested high-roads from Rajputána, from Jhálávád, from Ahmedabad, and from the three seaports of Dholera, Bhávnagar and Gogha, Viramgám became a rendezvous for droves of camels laden with silks, clarified butter, raw sugar, and dyes from the warehouses of Visnagar and Rádhanpur and for carts bringing dry goods from Cutch, and grain from the fertile district of Pátan. Some of these commodities, such as rice, went to Jhálávád, and some, such as wheat, to Ahmedabad, but the bulk passed on to the sea coast, especially to Dholera, the carriers returning with dry goods, timber, metal, European cloth and other foreign wares, or with salt from the pans of Pátri and Jhinjhuváda.

Ahmedabad, 1818.

Nor did the revival of commerce fail to reach the capital of the district. In 1818, at the time of its transfer, cesses on trades and necessaries of life were abolished and duties reduced from 15 to 2½ per cent. The result of this change was to stir up a spirit of the greatest commercial activity.[4] The great northern route into Hindustán was once more regularly traversed by Vanjárás and Cháran bullocks and Sindhi and Rajput camels. Long droves of these animals laden with dyed cloth, opium, sugar, grain, oilseeds and dyes streamed down once more over the hills of Dungarpur into the plain of Gujarát and on into Káthiáwár, returning with salt, tobacco, and sea-borne produce. In two years the population of the city considerably increased, the import of raw silk rose from 11 to 37 tons (300 - 1000 Indian *mans*), the value of imported cloth from about £1300 to £2500 (Rs. 13,000 - Rs. 25,000), and the total

---

1 Collector of Sea Customs to Government, 10th June 1829.

2 The Collector reports to Government on 12th May 1824 that 'Viramgám being a small town with scarcely a single manufacture and but a limited trade its pecuniary transactions are very limited. *Hundis* beyond four or five thousand rupees are not procurable and only one or two persons will give them for that sum and those not on their own account.' Mr. Dunlop to Resident at Baroda, 27th April 1818.

3 Bom. Gov. Sel. XI. 73.

4 Many traders and craftsmen who had quitted the place returned, and though many of the military class left to seek employment elsewhere the population increased considerably. Mr. Dunlop, 1820.

Chapter VI.
Trade.
1802-1830.
Ahmedabad.

value of the trade was increased by £125,000 (Rs. 12,50,000). In the following years this advance was not kept up. The great stimulus to general trade given by the reduction of dues had passed off, and the leading merchants suffered severely from the failure of their opium speculations.[1] The value of exports fell from £281,777 (Rs. 28,17,770) in the three years ending 1823, to £199,027 (Rs. 19,90,270) in the three years ending 1826, and the value of imports from £405,557 to £310,257 (Rs. 40,55,570-Rs. 31,02,570). The next three years saw a marked revival of trade in exports from £199,027 to £260,289 (Rs. 19,90,270-Rs. 26,02,890) and in imports from £310,257 to £409,780 (Rs. 31,02,570-Rs. 40,97,800).[2] In these later years full harvests added to the great spread of tillage flooded the markets with field produce and prices fell rapidly. The Ahmedabad demand was of the greatest value to the country round.[3] 'We live upon the city' was a common expression among the villagers.

The following statement shows in detail the value of the chief imports and exports in the nine years ending 1829:

Ahmedabad City Trade, 1821-1829.

Articles.	1821-1823.		1824-1826.		1827-1829.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	£.	£.	£.	£.	£.	£
Grain	115,953	19,228	109,363	13,395	120,262	12,558
Clarified butter	52,297	20,114	48,926	9939	63,747	16,435
Molasses	22,439	10,627	18,441	7581	24,975	8053
Tobacco	58,526	56,135	17,238	15,751	25,188	23,185
Silk...	79,692	1121	50,498	.....	77,984	.....
Cochineal	9294	1500	16,056	40	30,108	.....
Iron	1952	409	2265	512	2971	251
Copper	4835	3399	4936	288	3372	1854
Cotton	24,419	12,702	10,778	4601	11,743	5492
Thread	5522	890	7714	376	19,601	626
Cloth	30,628	155,652	24,042	146,544	29,829	191,835
Total ...	405,557	281,777	310,257	199,027	409,780	260,289

In two respects this statement tells unfairly against the trade of the later years. The returns for the early years include a large item (£14,548) on account of opium, a trade soon after put a stop to by Government, and the apparent decline under other heads was, to a great extent, a fall in value and not in amount. Under imports, the most noticeable point is the increase in molasses, cochineal, and thread. Both in molasses and cochineal, as their values had fallen about one-third, the rise in quantity was much greater than appears in the table. Under exports, the chief point of interest was the increase in the export of cloth from £155,652 (Rs. 15,56,520) in the first three years to £191,835 (Rs. 19,18,350) in the last. On the whole, the trade of Ahmedabad was in 1828 very

[1] The Ahmedabad opium trade began in 1819. One Karamsi Dungarsi of Pálanpur was the first to engage in it on a large scale. Bom. Gov. Sel. V. 88.

[2] Writing in 1825 the Collector, Mr. Crawford, complains that the trade of Ahmedabad had not increased to the degree anticipated by Mr. Dunlop. The depression was, in his opinion, due to the gambling that resulted from the fictitious currency called *ánt* (see p. 73).

[3] Mr. Dunlop's Report to Government 251, 20th January 1830.

Chapter VI. Trade.

prosperous. But in the two following years (1829-1830) the agricultural distress caused by the ruinous fall in produce prices affected the trade of the city; and in 1830, Sir John Malcolm complained that Ahmedabad had not improved so much as might have been expected.

Generally, it may be said with respect to the state of affairs in 1830, that communications were still as bad as they could be, irksome land customs yet existed, and the great mass of the people remained absolutely untouched by the spirit of enterprize. So restricted was the intercourse of the district with the outer world, that in 1828-29 and 1829-30 great leniency in collecting the revenue was found to be necessary, because over-abundant harvest had so cheapened all kinds of grain as to cause the ryots difficulty in disposing of their crops. On the other hand, security of person and property had encouraged in the trading and carrying castes an activity which has since continued in ever-widening circles. Gogha still lay overshadowed by Bhávnagar; Cambay, the ancient port of the capital, was almost effaced by Dholera; but every other town and considerable village in the district had taken a bound in prosperity which promised the happiest results.

1831-1850.

During the next twenty years (1831-1850), these promises were more or less fulfilled everywhere, except in the cities of Dholka and Ahmedabad. Of the former it is sufficient to say that its position on the high road to Cambay no longer made it of consequence, and that it was weighted by an unwholesome climate and by an indolent Muhammadan population. Of Ahmedabad it may be said that the city was always more indebted to the Court and army, of which it was the head-quarters, than to its natural advantages. It was not, like Páli, the natural rallying point of a large inland country; it was not on any great Imperial route; it was consecrated by no religious traditions attractive to the Hindu trading classes; its river was impracticable, down to the very mouth, for the smallest ship; and even in the palmiest days its port was an incommodious roadstead fifty-two miles away. When we also consider that its brocade and silk manufactures were severely affected by the depression of Native Courts who were the chief customers, and that its lower classes of textile fabrics were from the first outrivalled by imports from Europe, we may easily understand how the once splendid commerce of the city, instead of returning to its old centre, became diffused among smaller outlying towns.

Viramgám.

In the north-west Viramgám had in 1835 become the most thriving town in the district. Since 1826 very considerable improvement had taken place. Population had increased and a surprising number of substantial and very neat houses had sprung up.[2] In the east rapid progress was made. Between 1826 and 1848 the number of houses in Parántij rose from 1685 to 3082, and in Modása from 1257 to 1572.[3] And there is reason to believe that other small

---

1 Bom. Gov. Litho. Papers 148, 30. 2 Bom. Gov. Sel. V. 66.
3 Bom. Gov. Sel. X. 6, and Bom. Gov. Sel. V. 54.

Chapter VI. Trade. 1831-1850. *Dholera.*

trade centres had similarly progressed, though no statistics with respect to them are at hand. In the south-west, continued silting in the old estuary of the Bhádhar caused several changes of position in the Dholera port. In 1850 it was fixed at Khun, and with the assistance of Bávliári the trade of the port maintained its prosperity.[1] In 1832 it was yielding an average yearly customs revenue of £8000 (Rs. 80,000). In the thirteen years ending 1846 cotton exports, though with great fluctuations, had risen from 27,716 tons in the five years ending 1838 to 51,750 tons in the five years ending 1846.[2] In 1848 Dholera numbered 6807 inhabitants, and most of the trade of the country to the northward passed through it on the way to Khun or to Bávliári. Some substantial houses were being built, and one or two handsome temples were nearly finished.[3]

Gogha.

The most notable feature of this period (1831-1850) was the temporary revival of the trade of Gogha. In the early part of the century efforts were from time to time made to attract trade to Gogha.[4] One chief obstacle to the success of this plan was the Bhávnagar chief's claim to share in its customs revenue. In 1818 this was commuted on the basis of an average of past receipts. Ten years later the place had made considerable progress. Out of a fund established by themselves the people, stimulated by the example of Viramgám, proposed to rebuild their ruined town walls, and in this, chiefly from the active support of Mr. H. Borradaile the Collector of Customs, they succeeded. About 1833 the port began to grow into favour for the shipment of opium brought from Málwa by Lunáváda and Kapadvanj.[5] In that year 317 boxes valued at £31,700 (Rs. 3,17,000) were exported, and the amount rose till the average of the four years ending 1846 was no less than 1399 boxes,[6] valued at £139,900 (Rs. 13,99,000). Its cotton trade had also considerably increased, the average Gogha exports for the thirteen years ending 1846 being 1760 tons compared with 2815 from Bhávnagar.[7] A number of Márvádi merchants established

1 About this time an attempt was made to establish a port at Moti Boru, at the mouth of the Sábarmati. But this, though wide, was choked with sandbanks and the experiment failed. Bom. Gov. Sel. V. 26.

2 The details are: 1834, 1169 tons; 1835, 7670 tons; 1836, 7161 tons; 1837, 9175 tons; 1838, 2541 tons; 1839, 44,079 tons; 1840, 12,236 tons; 1841, 7152 tons; 1842, 10,612 tons; 1843, 12,400 tons; 1844, 10,039 tons; 1845, 5920 tons; and 1846, 12,779 tons. Bom. Gov. Sel. V. 84.

3 Bom. Gov. Sel. V. 67.

4 Government's letter to Collector, 18th July 1806. Mr. Secretary Newnham to Mr. Rowles, Collector of Kaira, dated 11th August 1812.

5 Collector's Report, 15th December 1834.

6 Bom. Gov. Sel. V. 83.

7 The following comparative statement shows the yearly cotton trade of the rival ports:

Gogha and Bhávnagar Cotton Exports, 1834-1846.

Year.	Gogha.	Bhávnagar.	Year.	Gogha.	Bhávnagar.	Year.	Gogha.	Bhávnagar.
	Tons.	Tons		Tons.	Tons.		Tons.	Tons.
1834	424	1170	1839	1675	1966	1844	2238	4150
1835	1337	3969	1840	2609	1427	1845	371	1009
1836	1662	1675	1841 . ..	2271	3061	1846 .. .	1822	5142
1837	2362	4600	1842	2939	3723			
1838	88	179	1843	3081	4439			

Chapter VI. Trade.

agencies in the town, and carried on considerable traffic between it and Páli in opium, Cashmere shawls, wool, and other goods. The value of shawls exported was in 1839 estimated at £14,597 (Rs. 1,45,970) and in 1846 at £102,499 (Rs. 10,24,990). Exclusive of opium, the average yearly value of the whole trade of the port was, in the five years ending 1836, £148,290 (Rs. 14,82,900), and £441,034 (Rs. 44,10,340) in the five years ending 1847. This gleam of prosperity soon, however, began to fade away in favour of Bhávnagar. Later on, the opening of the railway in 1864 drew the Páli traffic to Ahmedabad, and since then the total value of the Gogha trade has been falling. The annual average value of the trade for the five years ending 1871-72 was £159,310 (Rs. 15,93,100) against £111,846 (Rs. 11,18,460) for the five years ending 1877-78.[1]

1851-1870.

Between 1851 and 1864 the great increase in the demand for agricultural produce and the rise in prices that set in about 1857, caused a rapid development of trade, and during the years of the American war (1862-1864) the trading classes shared largely in the riches that found their way into the district. But the cause of this increase of wealth was so exceptional, and so large a portion of it was lost in foolish and ruinous speculation, that but for the opening of railway communications in 1864, the district might have gone back very much to its old condition.

In 1864 the opening of the Bombay and Baroda Railway as far as Ahmedabad caused two great changes in the district trade. It took away much of the produce of the rich Kaira lands that formerly found its way to the Ahmedabad ports, and it replaced Ahmedabad in the position of a leading centre of trade. Besides Ahmedabad the portion of the line within the limits of the district contained only the Bárejadi station. Between 1868, when returns are first available, and 1871, when a branch was opened westwards from Ahmedabad, the traffic at the two stations shows a steady increase, at Ahmedabad, in passengers from 273,676 to 357,046 and in goods from 51,691 to 63,379 tons, and at Bárejadi, in passengers from 13,968 to 17,815; in goods a slight decrease from 289 to 267 tons. No returns are available to show how much of this trade formerly went by road to Cambay and the Broach ports. But the following

[1] The details are, average for the five years ending 1871-72, £159,310; 1873-74, £92,496; 1874-75, £99,752; 1875-76, £157,823; 1876-77, £127,962; and 1877-78, £81,196. In reading the above figures, it must be borne in mind that though not completed to Ahmedabad until 1864, for several years previously, by the opening of successive sections, the railway had been gradually coming into contact with the trade of the district. The railway classification of commodities does not correspond with the customs returns. But the following items may be found useful for purposes of comparison:

Ahmedabad Trade by Rail, 1868-1870.

Articles.	Imports.			Exports.		
	1868.	1869.	1870.	1868.	1869.	1870.
	£.	£.	£.	£.	£.	£.
Yarn	821	700	1039	..	...	...
Clarified butter	91	610	387	168	80	133
Seed and grain	1365	5603	5193	...	...	...
Sugar	5422	7444	6910	...	...	...
Molasses	9714	12,860	16,236	...	...	...
Cotton	15,824	28,206	33,495	..	..	...

Chapter VI.
Trade.
1850-1870.
Dholera.

statement shows that at Dholera, leaving out the years of the American war, during the first seasons after the opening of the railway (1862-1864), a fall in imports was more than balanced by a rise in exports.[1]

Dholera Trade, 1854-1870.

Year.	Imports.	Exports.	Total.	Year.	Imports.	Exports.	Total.
	£.	£.	£.	£.	£.	£.	£.
1854... ...	533,694	441,975	975,669	1865 ...	727,716	2,011,020	2,738,736
1855... ...	571,343	837,495	1,408,838	1866 ...	343,572	949,601	1,293,173
1860... ...	726,714	878,506	1,605,220	1867 ...	362,263	1,219,843	1,582,106
1861... ...	723,220	644,295	1,367,515	1868 ...	431,945	1,064,058	1,496,003
1862... ...	1,082,988	2,378,665	3,461,653	1869 ...	376,126	1,252,942	1,629,068
1863... ...	978,683	3,804,643	4,783,326	1870 ...	407,474	1,299,883	1,707,357
1864... ...	788,646	2,412,138	3,200,784				

The following analysis shows the changes that have taken place from year to year in the chief articles of trade at Dholera :

Dholera Trade, 1854-1870.

Articles.	Imports.					
	1854-55.	1855-56.	1860-61.	1861-62.	1862-63.	1863-64.
	£.	£.	£.	£.	£.	£.
Raw silk	14,775	28,200	4467	9522	4712	185
Yarn	39,138	36,677	30,121	56,720	33,515	4467
Ivory	10,854	10,769	9570	13,883	16,500	7292
Clarified butter	.....	.....	.....	.....	.....	.....
Grain	.....	.....	590	1241	1321	74,141
Cocoanuts	8445	12,159	15,523	17,910	13,136	12,352
Dates	1307	7231	8177	23,406	22,751	40,662
Sugarcandy	1828	7014	10,816	9956	9644	18,904
Sugar	71,602	40,163	85,235	75,933	78,185	110,136
Metal	30,063	26,685	80,920	96,221	96,134	85,847
Seeds	366	.....	.....	.....	.....	.....
Cotton	.....	.....	.....	.....	.....	.....

Articles.	Imports—*continued.*						
	1864-65.	1865-66.	1866-67.	1867-68.	1868-69.	1869-70.	1870-71.
	£.	£.	£.	£.	£.	£.	£.
Raw silk	105	132	...	...	...	...	...
Yarn	7988	4454	...	1507	2432	1631	1368
Ivory	11,548	5285	2528	3540	3230	774	144
Clarified butter	.....	392	40	...	457	138	672
Grain	42,510	18,735	11,643	23,469	56,369	106,3[illegible]	90,866
Cocoanuts...	23,544	19,587	40,790	20,699	21,884	14,[illegible]08	12,700
Dates	22,889	37,242	19,589	31,709	16,054	[illegible],229	2057
Sugarcandy	12,122	13,742	9509	9264	12,831	10,559	9679
Sugar	130,620	157,566	61,731	50,109	67,276	63,643	78,281
Metal	89,421	65,301	5885	76,435	51,994	32,696	28,784
Seeds	.....	...	...	...	...	...	...
Cotton	.....	...	...	...	...	...	...

1 Gogha is left out, as it is virtually a Káthiáwár port. Besides, against its losses, Bhávnagar gains may fairly be set off.

Dholera Trade, 1854-1870—continued.

Articles.	Exports.						
	1854-55.	1855-56.	1860-61.	1861-62.	1862-63.	1863-64.	1864-65.
	£.	£.	£.	£.	£.	£.	£.
Raw silk	...	...	...	...	...	.....	...
Yarn	...	...	...	...	...	.....	...
Ivory	...	...	...	...	...	.....	...
Clarified butter	26,344	39,276	12,435	11,967	6366	6661	14,364
Grain	13,375	44,077	4826	4293	3444	6364	...
Cocoanuts...	...	...	...	...	...	.....	...
Dates	...	...	...	...	...	.....	...
Sugarcandy	...	...	...	...	...	.....	...
Sugar	...	...	...	...	...	.....	..
Metal	...	...	...	...	...	.....	...
Seeds	2456	4568	...	...	...	.....	...
Cotton	324,648	640,667	753,132	539,979	2,358,181	3,770,410	2,381,925

Articles.	Exports—*continued.*					
	1865-66.	1866-67.	1867-68.	1868-69.	1869-70.	1870-71.
	£.	£.	£.	£.	£.	£.
Raw silk	.....	.....	.....	.....	.....	.....
Yarn	.....	.....	.....	.....	.....	.....
Ivory	... ..	.....	.....	.....	.....	.....
Clarified butter	1368	1465	643	.....	.....	.....
Grain	1578	7128	9390	1644	595	1608
Cocoanuts...	40	.....	.....	.....	.....	.....
Dates	.....	.....	.....	.....	.....	.....
Sugarcandy	.....	.....	.....	.....	.....	.....
Sugar	.....	.....	.....	.....	.....	.....
Metal	.....	.....	.....	.. ...	.....	.....
Seeds (Rapeseed) ...	18,725	.....	... ..	.....	.....	.....
Cotton	.....	936,383	1,199,142	1,059,111	1,248,393	1,295,983

These figures show three chief changes: first, the more valuable raw materials for manufacture in Ahmedabad have almost entirely abandoned the sea route. Second, Dholera instead of exporting has begun to import grain. For this change there are two reasons. The field produce of the rich Kaira lands, formerly brought to Dholera for consumption and shipment, now goes by rail, and near Dholera grain and pasture have to a great extent been replaced by cotton. Third, cocoanuts, dates, sugar, and metal, the luxuries of the lower and cultivating classes, show on the average an unmistakeable increase. Besides this, it is worthy of note that, excluding the special American war seasons, there has been a steady development in the exports of cotton, and that in 1865-66 occurs the first record of the export of rapeseed, a branch of trade which has since passed to the railway and assumed large dimensions.

Railway Details.

The last period of the trade history of the district is the seven years ending 1877. The chief feature of this period is the construction of a branch line of railway running west from Ahmedabad. For seven years Ahmedabad continued to be the terminus of the railway. In 1870 an extension was carried three miles west to Sábarmati station on the right bank of the river, from that in May 1871 fifteen miles to Sánand, then in November 1871 twenty-three miles to Viramgám,

Chapter VI.
Trade.
1871-1877.
Railway Details.

and in May 1872 forty miles to Wadhwán. In 1873 a branch twenty-three miles long was continued from Viramgám north-west to Pátri and the Khárágheda salt works. There are at present (1878) ninety-three miles of railroad within the limits of the Ahmedabad district, provided with thirteen stations. The following statement shows, for the seven years ending 1877, the passenger and goods traffic at each station in the district :

Ahmedabad Railway Traffic, 1871-1877.

Station.	Distance in miles from Bombay.	1871.		1872.		1873.	
		Passengers.	Goods.	Passengers.	Goods.	Passengers.	Goods.
			Tons.		Tons.		Tons.
Bárejadi	298¾	17,815	267	19,314	657	16,284	324
Ahmedabad...	309½	357,046	63,379	466,045	59,430	475,829	57,262
Sábarmati	312½	5336	5505	7797	1322	6224	2072
A mbli Road...	319¼	1410	137	4673	43	4337	252
Sánand	327	21,988	4233	36,500	471	34,169	586
Chhárodi	334	589	11	9396	191	9524	217
Jakhváda	341½	493	...	11,590	107	10,275	107
Viramgám	349¾	7717	2529	115,091	24,553	133,714	21,442
Pátri Branch Jhund	358	...	...	...	...	3644	194
Pátri Branch Pátri	367½	..	...	...	...	12,377	1449
Pátri Branch Khárágheda ..	372½	...	...	...	...	4019	12,930
Sábli Road	359¾	...	...	4764	123	6037	300
Lilápur	368½	...	...	6469	172	13,211	290
Total ...	...	412,394	76,061	681,639	87,069	729,654	97,425

Station.	1874.		1875.		1876.		1877.	
	Passengers.	Goods.	Passengers.	Goods.	Passengers.	Goods.	Passengers.	Goods.
		Tons.		Tons.		Tons.		Tons.
Bárejadi	16,435	846	15,973	367	18,890	662	18,797	471
Ahmedabad	477,403	60,970	469,594	70,519	503,505	73,308	504,786	82,314
Sábarmati	6565	2413	9327	4830	10,509	7636	9784	4861
A'mbli Road...	4305	182	4698	309	5627	502	7174	627
Sánand	33,852	987	36,545	1386	38,561	6971	50,304	3185
Chhárodi	9671	83	9637	586	10,574	802	14,836	1087
Jakhváda	10,190	207	9389	1237	10,327	240	11,764	199
Viramgám	126,411	21,412	128,251	35,547	135,633	56,079	174,502	67,385
Pátri Branch Jhund	8338	392	9047	648	11,577	957	13,132	682
Pátri Branch Pátri	26,178	2749	33,370	2652	36,365	7205	49,437	10,301
Pátri Branch Khárágheda ...	9929	23,881	11,643	25,337	11,856	28,457	12,006	33,715
Sábli Road	5772	109	5377	128	7335	138	9645	251
Lilápur	11,746	466	11,414	228	14,299	281	16,013	299
Total ...	746,795	114,697	754,265	143,774	814,958	183,238	892,180	205,377

The extension of the railway westwards has affected the sea trade more than the opening of the main line from Bombay. Viramgám has become a local trade centre of some importance, competing directly with the sea route through Dholera. This competition together with some causes mentioned later on, has, as the following statement shows, reduced the value of the Dholera trade from £1,583,579 (Rs. 1,58,35,790) in 1871 to £586,591 (Rs. 58,65,910) in 1878, and of the Gogha trade from £159,310 (Rs. 15,93,100) in 1871 to £81,196 (Rs. 8,11,960) in 1878:

Chapter VI.
Trade.
1871-1877.
Railway Details.

Dholera Trade, 1871-1878.

	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.
	£.	£.	£.	£.	£.	£.	£.
Imports	345,684	213,806	184,315	192,183	200,063	170,661	196,368
Exports	1,237,895	606,315	685,069	777,172	484,548	394,542	390,223
Total ...	1,583,579	820,121	869,384	969,355	684,611	565,203	586,591

The following statement shows in tabular form the fluctuations in the chief articles of trade carried from and to the different stations of the Ahmedabad district:

Ahmedabad Railway, Goods,[1] *1868, 1873 and 1877.*

Articles.	1868.		1873.		1877.	
	Outward.	Inward.	Outward.	Inward.	Outward.	Inward.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Cotton, full pressed	10,126	76	16	...	378	142
Cotton, half-pressed	...	...	6365	372	6926	280
Cotton seed	47	783	85	983	293	2468
Fruit	296	2276	1199	3802	1884	4857
Grain and seed	3647	5604	13,981	3334	66,083	16,689
Hides	...	...	345	93	265	707
Metal	170	2329	363	1676	468	4629
Mahuda (Bassia latifolia)	2212	27	1575	1	670	84
Oil	56	50	154	135	851	179
Opium	150	...	947	...	795	...
Piece goods, Country	...	...	838	2262	1042	2660
Piece goods, Europe	446	2007	...	715	...	364
Salt	6	...	15,826	3581	31,208	8086
Sugar and molasses	14	9275	426	12,919	541	11,573
Sundries	2178	5186	6248	11,606	8742	16,871
Timber	34	3442	406	4156	950	11,009
Tobacco	2	163	49	608	178	1050
Twist, Country	22	374	174	310	78	278
Twist, Europe	...	...	...	...	...	45
Wool	979	3	1866	9	2027	27
Total ...	20,385	31,595	50,863	46,562	123,379	81,998

The details for the Ahmedabad station show an increase in the total number of passengers from 273,676 in 1868 to 504,786 in 1877, and in the quantity of goods from 51,691 tons in 1868 to 82,314 tons in 1877. The chief articles of export were cotton, grain, seed, hides, metal, *mahuda*, Bassia latifolia, oil, wool, and opium, and of imports salt, timber, and tobacco. The Viramgám station returns show that passenger traffic has increased from 133,714 in 1873 to 174,502 in 1877; goods traffic shows an increase from 21,442 tons in 1873 to 67,385 tons in 1877. The chief articles of export were cotton, grain, hides, metal, oil, wool, and of imports molasses, timber, tobacco, and salt. The details of the Sánand station show an increase in the total number of passengers from 34,169 in 1873 to 50,304 in 1877 and in the quantity of goods from 586 tons in 1873 to 3185 tons in 1877. The details of the Sábarmati station show an increase in the quantity of articles exported from 1966 tons in

[1] In 1868 only two stations, Ahmedabad and Bárejadi, were opened for traffic.

Chapter VI.
Trade.
1871-1877.

1873 to 4265 tons in 1877. The chief articles of export are wool and grain. The Jhund station returns show that passenger traffic has increased from 3644 in 1873 to 13,232 in 1877 and goods from 194 tons in 1873 to 682 tons in 1877. The Pátri station returns show that passenger traffic has increased from 12,377 in 1873 to 49,437 in 1877 and goods from 1449 tons in 1873 to 10,301 tons in 1877. The exports are cotton and grain; the imports molasses, timber, and tobacco. The details for the Khárághoda station show an increase in the number of passengers from 4019 in 1873 to 12,006 in 1877, and in the quantity of goods from 12,930 tons in 1873 to 33,715 tons in 1877. The principal article of export is salt.

Rail and Sea Details.

The chief changes in the district trade by rail and by boats may be thus summarised :[1]

The imports are sugar, piece goods, timber, metal, grain, cocoanuts, and molasses. Of these, timber and metal show a rise, and piece goods, grain, molasses, sugar, and cocoanuts a fall. The timber, brought chiefly by sea, rises by rail from £3809 to £8615, and by sea from £17,751 to £20,072; metal, also brought chiefly by sea, rises, by rail from £3983 to £10,148, and by sea from £16,991 to £18,363. Of the declining articles, grain has fallen by rail from £11,632 to £4688, and by sea from £46,291 to £14,935; piece goods, though by rail they have risen from £9968 to £12,727, have by sea fallen from £52,112 to £20,089; molasses, brought entirely by rail, have fallen from £24,722 to £15,734; sugar has fallen, by rail from £7917 to £6414, and by sea from £52,680 to £27,526; and cocoanuts, though by rail they have risen to £1753, have by sea fallen from £26,787 to £17,183. In order of importance the imports were in 1877, sugar £33,940; piece goods £32,816; timber £28,687; metal £28,511; grain £19,623; cocoanuts £18,936, and molasses £15,734. The exports are cotton, seeds, and grain. Of these seeds and grain show an increase and cotton a decrease. Seeds, carried entirely by rail, have risen from £2461 to £47,600, and grain has risen, by rail from £4067 to £26,215, and by sea from £148 to £5251. Cotton has fallen, by rail from £62,703 to £46,129, and by sea from £1,234,919 to £386,540. Arranged in order of importance, in 1877 cotton comes first with £432,669, seeds next with £47,600, and grain third with £31,466.

Of the cotton trade in 1877-78 the following are the chief details. Of 30,241 the total number of bales, 20,409 or 67·48 per cent went by boat and 9832 or 32·5 per cent by rail. Of late cotton merchants, both Europeans and Bombay natives, have begun to buy direct from the growers. But the usual practice is to buy either from a large dealer or from small middlemen who have bought from the grower. There were in 1877-78, 369 gins[2] worked by steam power; these were said to have been introduced about fifteen years ago (1863-64) during the time of the American war. Most of the gins are

[1] The railway returns are kept in tons and the customs returns show values. The value of the goods carried by railway has, as far as possible, been ascertained by local inquiry.

[2] The details are: Viramgám 130, Ahmedabad 117, Dholera 40, Dhandhuka 40, Sánand 22, and Pipli 20.

Macarthy's Patent Knife-roller Gins. The ginning season begins for old cotton about the middle of November and lasts till the middle of January; for new cotton it begins about the middle of March and lasts till the middle of June. Cotton is also ginned in *vakhárs* or yards by native hand gins, *charkás*. The *vakhár* is generally a square walled enclosure in or near the village, open on one side, with two or three rooms on another side for storing unginned cotton, *kapás*, and along the two remaining sides rows of sheds divided into open spaces, six to eight feet wide, with room in each for a native gin. In the middle of the yard there is generally a heap of cotton pods and a space for beating cotton before it is ginned. The work of ginning is seldom over before the rains set in (June 15). What is left is stored unginned and ginned in October after the rains are over. Cultivators, in their own houses, gin a small quantity of cotton for seed. The cost of ginning cotton by steam is about 2*s*. for forty pounds (Re. 1 a *man*) of clean cotton and the cost of ginning by native hand gins varies from 1*s*. 6*d*. to 1*s*. 9*d*. (12-14 *annas*). Of 30,241 bales exported in 1877-78, 8325 or 27·52 per cent were full pressed and 21,916 or 72·47 per cent were half pressed. In that year there were in the district seventy-two presses, sixty-nine[1] of them owned chiefly by native merchants were hand-worked half presses, and three, two at Dholera and one at Viramgám, owned by Joint Stock Companies were steam full presses. The pressing season begins in November and ends about the middle of June. The cost of pressing by steam varies from 8*s*. to 10*s*. (Rs. 4 - Rs. 5) a 400 pound bale, that of half pressing by *sikanja* is from 1*s*. to 1*s*. 6*d*. (8-12 *annas*) for a 600 pound bale together with an additional charge of 4*s*. (Rs. 2) for the wrapper and ropes.

The following tabular statement gives the chief details of the trade by rail and by boats:

Ahmedabad District Trade by Rail and Sea, 1871-1877.

Articles.	1871-72.				1872-73.			
	By Rail.		By Sea.		By Rail.		By Sea.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	£.	£.	£.	£.	£.	£.	£.	£.
Cotton	...	62,703	...	1,234,919	...	65,292	...	590,218
Piece goods ..	9968	...	52,112	...	9768	...	34,615	...
Seeds	...	2461	...	...	...	2156	...	...
Grain	11,632	4067	46,291	148	3876	6838	24,176	13,555
Molasses ...	24,722	...	...	...	12,908	...	...	...
Timber ...	3809	...	17,751	...	4756	...	19,462	...
Sugar	7917	...	52,680	...	6163	...	13,979	...
Metal	3983	...	16,991	...	3456	...	6236	...
Cocoanuts ...	...	...	26,787	...	...	...	22,885	...

1 The details are: Dholera 34, Mándal 12, Viramgám 10, Ahmedabad 8, Pátri 3, Sánand 1, and Dholka 1.

Chapter VI.
Trade.
1871-1877.
Rail and Sea Details.

Ahmedabad District Trade by Rail and Sea, 1871-1877—continued.

Articles.	1873-74.*				1874-75.			
	By Rail.		By Sea.		By Rail.		By Sea.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	£.	£.	£.	£.	£.	£.	£.	£.
Cotton	...	38,802	...	679,805	...	40,584	...	771,405
Piece goods ...	6202	...	25,590	...	13,828	...	24,818	...
Seeds	...	1605	...	...	...	17,208	...	...
Grain	1506	4490	9374	2566	2697	7007	5607	1946
Molasses ...	11,621	...	...	...	19,105	...	...	...
Timber... ...	3138	...	12,290	...	4757	...	15,131	...
Sugar	4457	...	15,504	...	7233	...	28,057	...
Metal	2694	...	8462	...	5501	...	7773	...
Cocoanuts ...	1223	...	26,081	...	1871	...	23,878	...

* Only for first half of 1874.

Articles.	1875-76.				1876-77.			
	By Rail.		By Sea.		By Rail.		By Sea.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	£.	£.	£.	£.	£.	£.	£.	£.
Cotton	...	48,747	...	478,112	...	46,129	...	386,540
Piece goods ...	12,305	...	27,874	...	12,727	...	20,089	...
Seeds	...	32,454	...	...	...	47,600	...	...
Grain	5036	7789	10,336	1067	4688	26,215	14,935	5251
Molasses ...	26,539	...	...	...	15,734	...	...	...
Timber... ...	14,721	...	16,816	...	8615	...	20,072	...
Sugar	8855	...	16,667	...	6414	...	27,526	...
Metal	6773	...	11,494	...	10,148	...	18,363	...
Cocoanuts ...	1543	...	27,394	...	1753	...	17,183	...

This statement shows, that though Dholera traffic continues greater than the total of all the railway stations from Ahmedabad to Wadhwán, yet the trade of that port has since 1871 steadily declined. This is partly owing to the less prosperous condition of the trading and cultivating classes suffering under the reaction from the inflated prosperity of 1862-1865. It is still more due to the petty burdens, imposed with the tacit consent of the merchants themselves, on cotton passing through Dholera. Every unpressed bale that entered the press-yard was beset by a crowd of idlers and religious beggars, each claiming and getting a handful under the name of custom or charity. The sum total of this pillage might have been borne under the easy-going system of the past. But in these days of keen competition it became so intolerable as to drive away much cotton to Bhávnagar. So seriously did the practice threaten the prosperity of the port, that in October 1876 the trade union or *mahájan*, put a stop to it and fixed a consolidated fee of 9*s*. 7½*d*. (Rs. 4-13) on each bale.[1]

[1] The following details give some idea of what actually was the practice previous to the trade edict of 1876 Before the bundle of cotton was put on the scales, it was opened and the buyer took out two or three pounds "as a sample." Five pounds more he claimed as his right, *hak*, and from one and a half to two pounds more as

Chapter VI.
Trade.
1871-1878.
Lines of Traffic.

At present (1878) the trade of the district passes along the following lines. From the north-east to Ahmedabad, come Parántij soap and field produce, and Málwa cotton, opium, and grain.[1] From the north, Márwár wool, cotton, hides, and clarified butter come to Ahmedabad, and flocks of sheep to Bárejadi. In return are sent metal, grocery, and dyewoods. The western Rajputána State Railway, now under construction, crossing this line of country will probably reduce Ahmedabad as an entrepôt for goods to almost entirely local importance. In the west, Viramgám, once a half-way house to Dholera, has now become its rival for the cotton of the fertile country between them, and has drawn to itself most of the traffic which on Vanjára bullocks used to pass from Ahmedabad west to Bhuj and north to Páli. It is also the seat of a large and increasing trade in seeds, most of them grown in the Baroda district of Pátan. In the south, in spite of its unpleasant anchorage, Dholera is, except for a few ships in the hot season, able to do without the help of Bávliári. Compared with any possible land-route, it possesses the advantages of cheapness and of a name in the cotton market which insures a preference to its exports.[2] As regards imports, Dholera still supplies by far the greater part of the district and adjoining country with timber from the Malabar Coast and from Broach. Iron, sugar, dried fruits, cocoanuts, and the like, are still sent out of its warehouses to Viramgám and the northern Baroda districts, to Rádhanpur, Pálanpur, Deesa, and even as far as Páli, in carts which have brought cotton and grain. The course of trade has scarcely yet adjusted itself to the new conditions introduced by opening the Viramgám extension railway. But it seems likely that whatever changes are made, so long as its creek can be entered by boats, a certain share of trade will always fall to Dholera.

General Condition of Trading Classes.

The railway has had, in this district, the usual result of depressing the retail shop-keepers by minimizing profits and by carrying

---

the right of the man who stamped his mark on the wrapper. Next, the press-owner took three or four pounds for himself, and one and a half nominally for the water-carrier of the establishment. He was followed by the commission agent, *ádatya*, to whom the cotton had been consigned, who got five or six pounds; by the broker, *dalál*, who got about three pounds; and by the labourers, who among them were allowed one and a half pound. Finally a big fist full, *pumaru*, would be given to any of the agent's, pressmen's or broker's pet beggars, who happened to be present. The result of all this often was to reduce a bundle of twenty-three or twenty-four *mans* to twenty *mans*. The consolidated fee is distributed as follows: Agent's commission 5*s.*; *Fatakia dalál's* commission 1*s.*; to the buyer's clerk or his son 6*s.*; labourers for unloading, &c., 3*a.*; messenger and weigher 4½*d.*; watchmen at press-yard 1½*d.*; to the press-owner 8½*a.*; bread for pariah dogs 1½*d.*; religion, for some object of the agent or broker 1*s.*; charity 5*d.*; lake fund for municipal purposes 5*d.*

[1] In this part of the district under British rule trade has greatly developed. During the last fifty years the value of imports has risen at Parántij from £5092 (Rs. 50,920) to £26,524 (Rs. 2,65,240), and at Modása from £5326 (Rs. 53,260) to £38,861 (Rs. 3,88,610).

[2] The cost of conveying three unpressed bales of fifteen *mans* each from the doors of the Viramgám railway station to Bombay viâ Dholera would ordinarily be as follows: Cartage to Dholera 16*s.*, freight by boat to Bombay at 9*s.* per bale including insurance £1 7*s.*; total £2 3*s.* The railway rate would be 19*s.* per twenty *mans*. On the other hand are to be set the risk and delays of the sea route. Goods shipped at Dholera may reach Bombay in seventeen or eighteen days, but it is scarcely safe to calculate on less than one or even two months. Many of these particulars have been kindly communicated by Mr. A. Whittle, of Messrs. Greaves, Cotton & Co.

Chapter VI.
Trade.

their larger customers to the wholesale markets. Moreover, the increase of population and the perfect security now afforded to trade, have resulted in the accession of large numbers to commercial employment, especially of the less energetic and shrewd and therefore less successful men who fill the air with their complaints. Yet there is no doubt that, on the whole, the humbler class of traders have as a body gained most hitherto by the improved communications. To them more than to the rest of the community, have accrued the moral advantages of intercourse with the outer world. They, too, have been the chief to profit by the increased facility of obtaining credit, consequent on the greater speed and safety of legitimate trade. In former days a consignment of cotton to Bombay was a speculation involving peril by land and sea and a certain sinking of capital for a lengthened period. Now with railways and telegraphs a much more rapid turn-over is possible, and business can be carried on with much less capital. Under these circumstances, much of the trade formerly monopolized by a few wealthy houses has been distributed among enterprizing clerks some of whom have become men of substance. Unfortunately the good effects of this change have been largely done away by an inveterate and general spirit of speculation. To this must be added habits of extravagant show, strange to the older generation among whom the rich were chiefly anxious to conceal their wealth. As the local proverb says,[1] 'Wealth used to keep in-doors, now she has come to the verandah.'

SECTION II.—TRADE GUILDS.[2]

Trade Guilds.
Origin and Growth.

In the typical village the community proper consists exclusively of husbandmen. All other residents from the shopkeeper to the sweeper are strangers within the gates, not regarded even by themselves as having any inherent right to a voice in the management of communal affairs. This is especially true of the artisan. He is distinctively known as the settler, *vasváya*,[3] the man who has 'come to live' in the place for the convenience of the original inhabitants. If unfairly treated by them or from any other cause dissatisfied with his position he still not unfrequently terminates a connection never anything more than a service contract and it may be supposed that he often took this course in earlier days. In such a case he would resort to some central place with more custom or some local facility for the exercise of his craft. From these and like causes

---

1 The Gujaráti is: *Ordáma Lakshmi hati; hamna umare dvichhe.*

2 This section is contributed by Mr. F. P. Lely, Bombay Civil Service.

An association among the higher classes is termed in the vernacular a *mahájan.* Among the lower classes, more especially if it happen to be coextensive with caste, it is called a *panchâyat.* Both words are in this account translated 'trade guild' not because the expression accurately conveys their meaning but because it is on the whole the most convenient that could be chosen.

3 This term is applied to the blacksmith, the carpenter, the potter, the tailor, the oil-presser, the gardener, the washerman, the barber, the shoemaker, the watchman, the scavenger, and the sweeper; that is to say the twelve servants who can claim as a matter of right to be fed by the villagers on an occasion of feasting. On the other hand the priest, the shopkeeper, the herdsman and the tanner have no such right and are not so called.

Chapter VI.
Trade Guilds.

the numbers in his class would increase in the town and they would assume the position of independent bodies the organization of each of which would naturally assimilate itself to that of the more ancient agricultural societies around. As in every village there is among the cultivators a council presided over by its elders and regulating the communal concerns, so in every town not only among the merchants but among the goldsmiths, the carpenters, the metal workers, the masons, the dyers, the potters, the oil-pressers, and almost all other craftsmen there is a guild prescribing trade rules and settling trade disputes under the guidance of its aldermen. The growth of these associations was made all the easier if all persons following the same pursuit belonged to the same caste. Even without this bond the faculty for combination so strong in the Natives of India would enable them to unite without difficulty for the promotion of their real or supposed interests. The corporate authority was further strengthened under native rule by the policy of the officers of Government to whom the system supplied a convenient agency for distributing and enforcing their irregular exactions. 'In former days,' says an old Viramgám dyer, 'if a Government officer wanted cloth dyed, he sent it to our aldermen who got the work done and either paid all expenses out of the common fund, or levied a special contribution for the purpose from the whole craft. In return the Government was always ready to give ear to a complaint against any one who, while carrying on our trade refused to share in the joint burdens or obey the head-man's order. Any one who misbehaved in this way would probably have found himself called into court and, until he yielded or left the town, saddled with the whole weight of the next and every further requisition.' Even under British rule trade organizations were for a time utilized in collecting *kasab verás* or trade cesses. These imposed in lump sums on each craft or calling were realized by the aldermen whose authority it was, in consequence, to the interest of Government to countenance.[1]

Constitution.

A *mahájan* is with respect to matters of trade, what a caste *panchâyat* is with respect to matters of caste.[2] Nominally it is composed of all the *freemen* of the particular craft. But a special

---

1 For example; in Dholka the chief alderman, *seth*, of the merchants' guild used not only to apportion among the members the cess imposed on his own guild but used to collect from the aldermen of the other guilds the amounts due from them respectively. For this he received a commission from the Collector of the district, generally at the rate of 4s. (Rs. 2) a trade. He also received a yearly present, *sirpáv*, from the treasury of £3-4 (Rs. 32). It has since been commuted into a lump sum.

2 Theoretically the trade council is distinct from the caste council; for example, in Ahmedabad there are four castes of carpenters and therefore four assemblies for caste purposes, but only one carpenters' *mahájan*. So the silk, *mashru*, weavers' *mahájan* in the same city contains both Kanbis and Vániás. Many more instances might be cited. It is important to note this because, especially in the smaller towns, a particular caste is often conterminous with a particular trade and the rules and penalties of both are enacted and enforced indiscriminately by the same body. Even in the *mahájans* of mixed castes the line between the secular and the religious is, as might be expected, not scrupulously observed. For example; not long ago a Visá-shrimáli Vánia of Ahmedabad who offended his caste by marrying a widow was expelled from the cloth dealers' *mahájan* to which he belonged and was in consequence obliged to close his shop and leave the town.

Chapter VI.
Trade Guilds.

position is allowed to[1] the *seths* or aldermen who are ordinarily two in number and who so long as they remain in the trade hold their position by hereditary right.[2] Sometimes it happens that from bad character, deficient ability, or some other drawback the regular heir to the dignity is considered unworthy of the confidence of the guild. But even in that case he retains the title though the power is made over to some other member of his family. With the aldermen are associated a few *freemen* whose personal qualities have gained them influence, and as none of the rest dispute their opinions communal authority virtually rests with this inner cabinet.

The only other office bearer in a guild and that only in the wealthiest is a salaried clerk, *gumásta*. It is his business to call the meetings, to collect monies due, to keep the accounts, to be on the look-out for and report to the aldermen all irregularities such as the non-observance by any member of an appointed holiday, and generally to execute any orders that may be given on behalf of the corporation.

Membership.

In most guilds even ordinary membership is a right of much value on account of the disabilities entailed by exclusion. In the same calling it generally passes as a matter of course from father to son. For newcomers the terms vary considerably and in fact depend on the extent to which individual success can be affected by the favour or disfavour of the guild. It is probable that in former days an entrance fee was always exacted except in the case of one who, or whose forefathers, had been obliged by adversity to give up an hereditary calling. Such a person if he wished to resume would only be required to pay up the arrears of annual subscription. At present it is computed that in the city of Ahmedabad there are twenty-nine guilds which levy from outsiders an entrance fee varying in amount from £2 (Rs. 20) in the case of the papermakers, to £50 (Rs. 500) in the case of the tinsmiths. In the smaller towns the question is often viewed as one simply of caste and if the applicant can satisfy the others on that head he is admitted to all communal privileges. Again in consequence of the greater security now afforded by law to individual action, many guilds have been obliged to relax or even entirely remove their restrictions, in order to prevent the growth of external opposition. So far has this necessity spread that in many bodies all are received who have served an apprenticeship and who agree to obey the rules and contribute according to custom to the common fund.

Apprenticeship.

It is not the practice to execute indentures or to pay a premium for apprenticeship. A boy intended for any branch of mercantile life is usually taught by his father or other near relation. If he have no such friends already in business he may get a situation as a clerk, on a very small salary rising as his usefulness increases.

---

[1] The word *seth* is derived from Sanscrit and denotes the best man and hence the head, chief, or foreman of any company. It is often loosely applied to any respectable merchant as an equivalent to Mr. or Sir. The aldermen of the poorer and less influential guilds are called *patels* not *seths*.

[2] Though in these assemblies much importance is attached to birth yet here as everywhere else energy and ability make their way. Hence the proverb, *Lakhte lahio nipje · bhante pandit hoe : Ladte sethio nipje tenu kul na puche koe* ; writing makes the writer ; study, the scholar ; striving, the *seth*, no one asks of what family he is.

In the end, if of an enterprizing turn, he begins to speculate on his own capital or credit. Among artisans a boy who is learning of some one other than his father receives from the beginning small wages increasing according to his progress. On new year's day it is thought an appropriate act of courtesy for him to offer a *bida* or roll of betel leaves, or a cocoanut to his master who in return gives him a *dogla* or jug full of sweetmeats. If his father give a dinner party the master is invited to sit on the *pát* or raised bench and is expected to acknowledge the compliment by presenting the boy with a turban or a small sum of money proportioned to the means of the parties. When the apprentice has learned his work, on giving a dinner to the rest of the members, he is admitted to all the privileges of the craft. Towards the expense of this dinner the caste *pancháyat* often contributes if the lad is poor and respectable.

Jurisdiction.

The authority of the guild is chiefly exercised in fixing trade-holidays and enforcing their observance; in collecting and applying the common funds; and generally in taking cognizance of any matter which concerns the members as a craft, such as the prohibition or sanction of an improvement, the rate of wages, or the hours of working. The action of these corporate bodies will be best explained by a few specific examples. During the American war the potters' union or guild at Dhandhuka resolved to make up for high food prices by raising the price of their wares. This their customers resisted. The merchants and bankers, *sáhukárs'*, guild, comprising all the most influential persons of the place, took up the quarrel on behalf of the general community. They forbad any one buying earthen ware. They sanctioned the use of metal basins in marriage ceremonies. They sent men in disguise to distant villages to buy earthen pots at the expense of the corporate funds and to bring them in for those who had none of metal. Still the potters held out. After some months the yearly auction sale of the right to dig clay in the village lands came on. An agent of the *sáhukárs'* guild was sent to outbid the potters at any cost and so deprive them of their raw material. This last move forced the potters to yield, and the price of earthenware to this day is unchanged. Against the barbers and the carpenters, who about the same time also raised their rates, similar tactics were adopted, but with less success. Agents sent to bring barbers from other places failed, and a flood destroying many houses forced the people to agree to the carpenters' demands. One or two instances may be given from the city of Ahmedabad. In consequence of the levy of a municipal cess of one pie on each donkey-load of bricks entering the city gates, the brickmakers' guild forbad its members delivering goods anywhere except at the kilns, thus throwing on the buyer the cost of carriage as well as the payment of the new duty. In another case some outside masons settling in the city began to work for 1*s.* (8 *annas*) a day instead of 1*s.* 3*d.* (10 *annas*) the lowest rate allowed by the local guild. To stop this competition, the aldermen of the masons' guild communicated with those of the potters' guild and induced them to issue orders that no building materials of any kind should be sold except through the agents, *daláls*, of the former. The

Chapter VI.
Trade Guilds.
Jurisdiction.

rivals were thus driven out of the field being unable even to get sand for their mortar. The authority of a guild is still oftener used in keeping back any undue energy within its own circle. For example, at the opening of each season the aldermen of the city tilemakers prescribe exactly how many thousand tiles each member may make, and the minimum rate at which he may sell them. Again the whole of the hand-made textile fabrics exported from Ahmedabad must pass through one or other of about a dozen agents, *karidiás*, who in their turn are forbidden to take more than a certain commission. Formerly if a bricklayer chose to do extra work in the early morning, he was entitled to 3*d.* (2 *annas*) a day in ready cash besides his regular pay which he received at the end of the contract, or month by month. But lately as employment was scarce and several of the craft had nothing to do, the aldermen issued an order that no one should on any terms work overtime. It will be noticed that the object of the above three edicts was the same, to distribute business among all alike and keep individuals from enriching themselves at the expense of the rest.

The most incontestably useful function of a guild is that of arbitrating in trade disputes. For example, the goldsmiths' guild investigates charges of alloying metal; the cotton-merchants' guild settles in case of dispute whether the quality of the cotton delivered is according to contract, and, for the purpose of adjusting time-bargains, the dealers in various staple articles fix what on certain days shall be considered the market rate of each article. In the present day the guilds confine themselves to effecting an amicable arrangement and though they never attempt to enforce their decisions, the parties interested generally acquiesce. The number of disputes in the export trade of the district thus coming before them is much less now than in former times, when, owing to the slow conveyance of goods and of information, prices would often rise or fall so greatly between the time of agreement and of delivery, as to make one party or other grasp at any excuse for evading the bargain.

The breach of a guild rule is ordinarily punished by fine. Thus in Ahmedabad a mason, shortly after the decree against extra hours was passed, had to pay £5-2 (Rs. 51) for working over-time. Refusal to pay a fine or any other very grave offence is followed by expulsion. Even when unattended by caste excommunication this is a severe penalty as the privileges of a member are often of great value. In the first place he is protected against the competition of the rest. If he leaves any work unfinished in consequence of a dispute with his employer, no fellow craftsman will take it up until his demand, if considered reasonable by the guild, has been satisfied. So among carpenters, blacksmiths, and other artisans, there is a standing order forbidding any member establishing himself in a village where another member is already settled. Secondly, exclusion from the guild deprives a man of all the minor good offices of fellowship in business life, pretty much as exclusion from caste operates in social life. If the outsider is a master manufacturer, no skilled labourer will enter or stay in his service. If he is an operative, no one will lend him tools or work along with him, and the ganger, *mukádam*,

will arrange for him only at boy's wages. If he is a dealer in exports or imports, the guild brokers will refuse to act for him, and according to the market custom business is impossible without their intervention.

General Result.

On the whole these unions have been hurtful to the general interests.[1] The clever and the stupid, the hard worker and the idler have been kept at the same level by an indolent and bigoted communism which does not scruple to enforce its decrees by the most formidable religious sanctions; all efforts at improvement have been suppressed and the accumulation of individual wealth impeded. But the power of these corporations is passing away. They themselves recognize that they must execute their penalties charily lest they bring themselves within the meshes of the law against extortion and criminal intimidation. The industrial classes more than most are showing signs of unwonted personal independence. The quick spread of news by rail and wire is helping to free trade from the tribe of agents who under various names are the ready tools of communal tyranny. Lastly the new steam mills springing up in defiance of the guilds and beyond their control, offer a fair field in which native mechanics have already begun to show of what they may be capable if left untrammelled.

Communal Funds.

Except occasional fines the poorer guilds have few sources of revenue. The wealthier bodies, composed of the capitalists in the larger towns, draw considerable incomes; 1 from a small tax[2] on the import and export of the principal articles of trade; 2 from death-bed donations or donations by heirs; 3 from fines and entrance-fees; 4 from the auction sale of the right to open shop or from fees levied on those who wish to do business on holidays; 5 from land and sometimes from house property. In the city of Ahmedabad almost every *mahájan* owns a *vádi* or lodge where it holds its meetings. The only cotton-press in Dholka was erected by the merchant's guild and its

---

1 'I have seen instances of an individual being denied the privileges of his caste for the crime of having invented some improvement by which he was enabled to abridge labour or produce articles cheaper or of a superior quality to others. Some are restricted from practising the trade their inclination or genius leads them to. I would therefore empower the civil court to restrict the guild's action to religious and caste offences.' Mr. Dunlop in 1820.

2 The following cesses, levied by the Dholera *mahájan*, are quoted by way of illustration. Exports from the town pay 1½*d.* (1 *anna*) a cart if drawn by two bullocks, and 3*d.* (2 *annas*) if drawn by four. The same rates are charged on imports except grain which pays only three pies per cart of whatever size, and cotton. On this latter article a consolidated fee of 9*s.* 10½*d.* (Rs. 4-15-0) per bale is levied and apportioned as follows: Consignee's commission 5*s.*; brokerage 1*s.*, half of this item is divided among the consignee's clerks; buyer's clerk 6*d.*; labourers for unloading 3*d.*; watchman and weigher 4½*d.*; ditto at press yard 1½*d.*; half pressing 8*d.*; bread for feeding pariah dogs 1½*d.*; charity 1*s.* devoted according to the religion of the consignee or if there is no consignee of the broker, general charity 5*d.* expended in alms to infirm people and other general objects of charity; charity and water, *dharam taláv*, fund 5*d.* This last is a special local fund raised with the sanction of Government and spent under its general directions on the water-supply and other works of utility. Every loaded ship arriving off the wharf has according to its size to pay from 2*s.* to 4*s.* 6*d.* (Rs. 1 to 2-4) towards the maintenance of a sailor's temple. Cocoanut huskers, every day they are employed, are obliged to unhusk fifty nuts for the benefit of the *mahájan* funds. The price of that amount of labour is recovered at the end of every month from the ganger, *mukádam*, and credited half to the animal home and half to a *Vaishnav* temple. There are many other such petty imposts which it would be tedious to enumerate.

Chapter VI.
Trade Guilds.

profits are credited to their fund. Other small miscellaneous items vary in different places. A percentage on the profits of exchange bills, *hundis*, and on gambling bargains, formerly yielded larger sums, but under the changed conditions of trade this is no longer the case.

Communal Funds.

The artisan associations have as a rule no fund for current expenses nor do they contribute to any charitable or religious objects. A fine usually takes the form of a dinner to the members, or if too little for a dinner it is put by until money enough has accumulated. The funds of the various merchant guilds, often very considerable, were until lately, and in Viramgám still are, appropriated by the Shrávak Vániás for the support of their *pánjrápol* or animal home. Except in Viramgám the other contributories have asserted the claims of their own charities and now according to the general practice only money paid by Shrávak merchants goes to the animal home; that paid by Meshri Vániás goes to their local temples; that by Khojás to His Highness A'ga Khán, and that by other Muhammadans to some local shrine, *roza*. The wealthier bodies also sometimes spend their funds on food kitchens, *sadávarats*, on places for the supply of drinking water to travellers, *parabs*, on road-side resting-places, *visámás*, and on other works of charity.[1]

It will be seen from the above that the various trade guilds are theoretically independent. In practice, however, each according to the wealth and position of its members, exercises more or less influence over the others. Thus in the city of Ahmedabad the *Dosi Vániás* or cloth dealers and the *Tázias* or dealers in raw silk, stand pre-eminent. In the smaller towns the *sáhukárs* that is all bankers[2] and respectable merchants being comparatively few in number, combine together for most purposes, into a single guild, which is by far the most influential body in the place and is generally able to carry with it all the others. It is this aggregate of all the more respectable bodies which is commonly known to the outside world as the town *mahájan*.[3]

Sectarian Bickerings.

Here it is necessary to notice the disturbing influence of the Jain religion upon the trade organizations. The Shrávaks, or lay professors

---

1 A pleasing instance may be quoted from Dholera. A sub-inspector under the Cotton Frauds Act who was employed there died a few years ago and the Merchants' *mahájan* have ever since subscribed £2 10*s*. (Rs. 25) a month for the support and education of his young family.

2 Compare Hallam on the English guilds. 'In towns not large enough to admit distinct companies, one merchant-guild comprehended the traders in general, or the chief of them; and this became the subject of incorporating charters. Middle Ages, III.' On the other hand the phrase the Ahmedabad *mahájan* is a misnomer, there being no permanent aggregation of guilds which can claim to represent the whole of that city in the sense that the Dholera *mahájan* represents Dholera. The influence of the *Nagar Seth* combined with that of the alderman of the cloth dealers can generally command the adherence of all, but in such a case the various merchant guilds merely unite for a temporary purpose. They do not amalgamate into one guild as in the smaller towns.

3 In 1827 a petition was presented to Government from the Shrávaks of Ahmedabad complaining that although in 1820 the various *mahájans* had agreed to continue to devote to the support of the animal home ¼ per cent on all goods purchased, the Meshri Vániás had diverted their contributions to their own religious head. The Collector reported that though payments to the animal home might have been strongly recommended by the native rulers, no instance of actual enforcement could be traced. Under the circumstances Government refused to interfere.

Chapter VI.

Trade Guilds.

Sectarian Bickerings.

of that faith, long held such an ascendancy in the mercantile communities of this district that they were able to impose their will upon the rest and above all to appropriate all the corporate cesses on trade for the support of the animal home their own particular charity. Soon after the introduction of British rule the other religionists, especially the Vaishnav Hindus, began to contest this assumption and the disputes between them ran, and still run, so high that even in the purely business-world the line of demarcation between sect and sect goes deeper than that between guild and guild. Thus in Ahmedabad the majority of the cloth dealers being Jains though they yield deference to the Vaishnav head of their guild, pay their share of the corporate fund to the alderman of the bankers' guild who has the management of the animal home and whom they obey as the chief supporter of the Jain religion. As intimated above the quarrel about the application of the common funds has been in most places settled by distributing them according to the sect of the contributory. But from time to time bickerings continue to ruffle the surface of mercantile life. That they arise out of sectarian jealousy rather than any important difference in creed may be inferred from the fact that both Kanbis and Meshri Vániás, who are the chief Vaishnavs among the trading classes, acknowledge the meritoriousness of the animal home by subscribing to it out of their corporate funds when it is in need, and that the silk dealers' guild most of whose members are Vaishnavs actually maintains a small similar institution of its own. Another not infrequent subject of dissension is the suspension of business on each other's religious holidays. The following account given by a Viramgám confectioner illustrates the character of these quarrels and the mode in which they are generally settled. 'We confectioners are nearly all Vaishnavs but nevertheless we used to shut our shops on Shrávak holidays. One year the *pachusan* of the two sections of the Shrávaks, the *Dasa* and the *Visa*, fell on different days and we said we would only observe that of the Dasa Shrávaks. The next year we grew bolder and declined to observe any of the Shrávak holidays at all as they declined to keep ours. The quarrel went on for some time and, aggravated by an attempt the Shrávaks made to bring in some outsiders, our guild passed a law that no member should have any dealings with a Shrávak. Thereupon two members who happened to be Shrávaks seceded. We then besought the Vaishnav members of the merchants' guild to help us, and they seeing our case to be just, stopped their contributions to the animal home and threatened to form themselves into a separate guild. This brought the Shrávaks to terms and they agreed to keep one of our holidays.'

Nagar Seth of Ahmedabad.

The position of the *Nagar Seth* or 'city chief' of Ahmedabad is standing evidence of the influence still possessed by the Shrávak religion in the mercantile world of Gujarát. In the other towns of the district the title has fallen into disuse and never meant anything more than that its holder was the chief alderman of the *sáhukár* guild. In Ahmedabad, however, it was formally conferred by the merchants on the head of a family long held in repute for its wealth and public spirit, but still more for its liberal support of the Jain faith. He

Chapter VI.
Trade Guilds.

is on occasion the head of the civil community but he is always and above all the head of a great religious sect.[1] In the former capacity his title is at all ordinary times purely honorific. Strictly speaking he is only an alderman of the bankers' guild and his civic authority is limited to that position though his influence is naturally much strengthened by the fealty of all Shrávaks of whatever guild. In seasons of public calamity the citizens look to him to perform penance for the whole people as, for example, if the rain holds off he is expected to circumambulate the city walls pouring out milk to appease Indra the offended ruler of the skies. But in ordinary times he does not attempt to deal with any public matter without first consulting the chief alderman of the cloth dealers' guild, who is sometimes distinctively called market chief, *Chautáno Seth*, and who is looked up to as the head of the Vaishnav sect in much the same way as the *Nagar Seth* is head of the Shrávaks. These two together can carry the bulk of the mercantile community with them on such questions as the declaration of a holiday or any other religious or semi-religious question. By Musalmáns, Pársis, and other non-Hindus such behests would be totally disregarded. On the other hand with reference to any entirely secular matter they exercise no authority even over their own co-religionists who do not happen to belong to one of the two guilds over which they preside.

Animal Homes.

The following is a statement of the *Pánjrápols* or animal homes maintained in the Ahmedabad District:

Animal Homes, 1876.

Town.	Approximate average number of four-footed inmates.	Approximate yearly expenditure.		Town.	Approximate average number of four-footed inmates.	Approximate yearly expenditure.	
		£.	Rs.			£.	Rs.
Ahmedabad[1]	814	1500	15,000	Mándal ...	380	500	5000
Dholka ...	25	120	1200	Barvála ...	26	60	600
Sánand ...	.....	100	1000	Dholera ...	700	1000	10,000
Modása[2] ...	.....	...	...	Gogha ...	22	87	870
Viramgám ...	590	600	6000	Parántij ...	25	100	1000
Pátri[3] ...	.....	...	...				

[1] Executive of the branch at Ranchera.
[2] Only for temporary shelter of animals pending transfer to Sánand.
[3] Only for temporary shelter, pending removal to Mándal.

[1] One of the ancestors of the present city chief of Ahmedabad Ráo Bahádur Premábhái Hemábhái is said to have held a grant of Pálitana. In 1781 (1129 H.) the leading guilds formally acknowledged Khushálchand Lakhmichand the great-grandfather of the present *Nagar Seth* as the chief merchant of the city. In 1725 (1781 S.) the same Khushálchand Lakhmichand saved the city from plunder by the Maráthás. In recognition the combined guilds of the city assigned to him the perpetual right to levy a quarter per cent on all goods stamped in the municipal weighing yard. It has been often stated (Briggs' Cities of Gujaráshtra 212, 213 and Collector 1604, 24th December 1859) that Khushálchand's services were rendered on the occasion of General Goddard's siege (1781). The mistake probably arose from confusing 1781 *S.* with 1781 *A.D.* Successive Gáikwárs conferred honours on the family such as a state chair, *pálkhi*, with a yearly allowance of £100 (Rs. 1000); the right to be preceded by torches; and the right to a canopy. In 1827 the Bombay Sadar Adálat on account of their wealth and respectability formally granted to the heads of the firm the privilege of having seats in the district court-house. The lien on the city trade has been commuted by the British Government into an annual pension of £213 (Rs. 2130) payable from the public treasury.

Except in special cases, as when at an auction a butcher is bidding for an animal and no one is able to oppose him, it is not the practice to spend the general funds of the asylum in buying animals. In Ahmedabad, where the revenues are large, many animals are saved from slaughter at the weekly Friday fair not only by private charity but by the *pánjrápol* clerk who attends for that purpose. All living things[1] are freely received without fee, though a dweller outside the town who sends an animal will generally, if well-to-do, accompany it with a small contribution towards its support. Creatures dangerous to life are not often brought and would perhaps be rejected. Any young born in the home are not usually sold or otherwise disposed of, but no objection is felt to making use of them for the good of the home.

In the Ahmedabad home all animals are fed within the walls except milch cows which are taken to graze by herdsmen at a monthly charge of 2*s*. (Re. 1) a head. At the other homes all cattle able to walk are sent out daily to graze. If their number is small they share the common grazing grounds with the other village cattle. In larger places fields are rented or even bought for pasture. Within the walls animals are tended by a staff of servants and if necessary fed with milk. Surplus animals in the Ahmedabad home are drafted to Ranchera, a village in the Gáikwár's district of Kadi devoted to that object by a late *Nagar Seth*[2]; from Dholera they are sent to Pálrtána, and each of the smaller institutions has an arrangement by which its surplus can be sent to some larger and wealthier home. The carcasses of animals which die in the home are sometimes given, sometimes sold to Dheds, who carry them off for the sake of their skins and bury them.

Besides accommodation for four-footed animals and birds every home, except the very smallest, contains at least one *Jivát Khána* or insect room. In Ahmedabad this is filled chiefly by a servant whose business it is, especially in the rainy season when putrid matter is plentiful, to carry a bag round the streets for the collection of maggots and other small vermin. A little grain for their subsistence is thrown into the room and at the end of each year a new room is opened. The old room is closed for ten or twelve years, and after that, as all life is supposed to have ceased, its contents are cleared out and sold as manure.

The general management of the home and the custody of its funds are left to some leading merchant of the Shrávak faith who is practically unfettered except by the obligation to consult on any important matter, a few of his chief co-religionists. He is assisted, in all except the smallest places, by a paid clerk, *gumásta*, who

---

[1] The following is a detailed list of the inmates of the Ahmedabad home on a day in the beginning of 1875; 265 cows and bullocks, 130 buffaloes, 5 blind cattle, 894 goats, 20 horses, 7 cats, 2 monkeys, 274 fowls, 290 ducks, 2000 pigeons, 50 parrots, 25 sparrows, 5 kites, and 33 miscellaneous birds. By these were daily consumed 2500 bundles of hay, besides a large quantity of grain and milk. 120 pounds (3 *mans*) of millet or pulse were supplied daily to the pigeons alone.

[2] This institution has also by Hathising Kesrising, a member of the Nagar Seths' family, been endowed with half the village of Mánkol in Dholka.

Chapter VI.

looks after details, keeps the accounts and generally carries out orders. It not unfrequently happens that the ordinary revenue is insufficient to meet the expenditure in which case the *mahájan* [1] is convened and imposes upon itself an extra subscription.

SECTION III. — MANUFACTURES.

Manufactures.

Ahmedabad holds an important place as a manufacturing district. Except the preparation of salt carried on near the Ran most of its manufactures are centred in Ahmedabad city and are the result of the skill that gathered there when under its Muhammadan rulers the best workmen in steel, gold, ivory, enamel, inlaid mother of pearl, and lacquered ware met with great encouragement.[2]

SALT.

From very early times salt [3] has been made in the western villages of Viramgám, bordering on the Ran. In the sixteenth century (1590) great quantities were manufactured[4] and in the eighteenth century the produce of the Jhinjhuváda pits is specially noticed for its white colour and good quality, resembling bits of sugar.[5] When Viramgám was surveyed in 1826 there were within a quarter of a mile of the outer limit of the Ran, salt pans in four places, at Pátri, Udu, Fattepur, and Jhinjhuváda; all of them, except Pátri, within the limits of the Jhinjhuváda estate. The salt was made in beds, *kiyárdás*, hollowed about a foot below the level of the Ran and surrounded by a foot high wall. The pans were generally about 100 yards long by fifteen broad covering an area of from forty-eight to seventy perches (½ to ¾ *bighás*). They were filled from brine pits about ten feet deep, the bottom secured by a rough wooden frame, *kantva*. The water, found only a few feet from the surface, was without the aid of bullocks easily drawn by a lift. The lift used was a pole hung on a pivot at about a quarter of its length, with a heavy weight of stones fastened to the longer end, and from the shorter, hanging over the well, a rope with a small earthen pot. Standing on a frame within the well and just above the water, the workmen with great speed filled the pot, let it be drawn up, and emptied into a channel leading to the pans. At first about four inches of water were let into the pan and then from day to day enough to make up for evaporation was gradually added. Every third day the whole was raked with an iron toothed instrument called *dantáli*, and after fifteen or twenty days the water was drawn off and a fresh supply let in. At the end of thirty days in the cold, and of twenty in the hot season, the salt was completely

Manufactures.

---

[1] This is the ordinary form of expression. But as has been shown the assembly is strictly speaking not a *Mahájan* in the sense of a guild, as it is bound together by common religious feelings not by the pursuit of a common calling. The wealth and numbers of the Shrávak Vániás and the energy with which they uphold the chief tenet of their creed give them such prominence that both in this and other matters they often succeed in making some sectarian action pass for that of the *sáhukár mahájan*.

[2] Forbes' Or. Mem. III. 132.

[3] The salt account is chiefly compiled from Bom. Gov. Sel. X. and from Mr. Pritchard's Salt Administration Report for 1873-74.

[4] Gladwin's Ain-i-Akbari, II. 71.

[5] Bird's Mirát-i-Ahmadi, 105.

formed and ready for sale. It was then gathered into heaps and during the fair season left till it was bought and taken away. Unsold heaps were at the close of the fair season collected in large conical mounds, the bottom parts, to protect them from water, were cased with earth, reeds, and grass, and the tops left uncovered as the salt soon grew hard and close enough to throw off rain. The monthly outturn of each bed was calculated at 18 tons (1000 *mans*) in the cold weather and 36 tons (2000 *mans*) in the hot. The salt makers called Agriás were Kolis by caste, and worked as husbandmen during the rainy season. They are described as a wretched uncommonly black class of beings. The salt formed in cubic crystals joined in large lumps called *kánkrás*, the best salt having the largest and most regular cubes. This salt called *vadágra* was uncommonly pure and free from the earthy particles found in the ordinary sea side, *ghásia*,[1] salt. Of Viramgám salt the best was made at Fattepur and the worst at Pátri.

Trade, 1826.

The produce of the pans was exported to the neighbouring parts of Gujarát and to Málwa but not to Káthiáwár, Meywár, or Cutch. Through Gujarát it was carried in carts, and to Málwa by pack bullocks. Among the natives there was a remarkable prejudice against a traffic in salt. No respectable merchant would undertake it, and the trade was consequently monopolized by Vanjárás. These men, salt owners as well as carriers, came in large bodies under a leader, *náik*, filled their packs, paid the price and duties in ready money, and left with the utmost order and regularity. Besides them, many potters, cotton spinners, and others, brought asses and buffaloes laden with *mahuda*, Bassia latifolia, mango and *ráyaṅ*, Mimusops hexandra, fruit from Kadi, and took back salt. To this petty retail traffic the whole trade was confined, no merchants ever embarked in it, and except at the pans there were no salt stores. The pans were supposed to be of great age. There was no account of their making, nor did it appear when the sovereigns of the country first assumed an exclusive property in them. The Musalmán rulers enjoyed a salt monopoly.[2] They appointed a superintendent, *darogha*, and prevented the opening of fresh pans. The Maráthás enforced the same rule, and on one occasion destroyed some new pans opened near Degám. To induce him to help them to prevent the opening of fresh pans, the Maráthás granted the chief of Jhinjhuváda one-third share of the produce of the pans within his estate. The Pátri pans were included in the first grant made to the Desái by Dámáji Gáikwár, but when that cession was revoked and the terms were altered by Rághoba, he reserved a fourth share of the produce. Under the British the whole management and interest in the pans were taken over by Government, and the share of the Thákor and Desái commuted to a fixed yearly allowance of £900 (Rs. 9000)

---

1 The natural Ran salt also called *ghásia* is unwholesome causing skin disease and diarrhœa. Its unwholesomeness is due to the presence of Epsom salts or sulphate of magnesium, which as the brine evaporates forms on the top of the common salt. Salt Collector's Report, 1873-74, 31.

2 Duties were (1590) collected. Ain-i-Akbari, II. 71. The revenue collected is 1750) included in the settlement of the district. Bird's Mirát-i-Ahmadi, 105.

Chapter VI. Manufactures. SALT.

to the Jhinjhuváda chief, and £1200 (Rs. 12,000) to the Pátri Desái. Under the Maráthás there was little order or regularity in the sale of the salt. Packs were charged at the rate of 6*d.* (4 *as.*) for 82 pounds (the Bengal *man*), while carts were not called to pay more than from 4*s.* to 8*s.* (Rs. 2 - Rs. 4). The consequence was that as it was much cheaper to take away salt in carts than in packs, the Vanjárás halted in some large town at an easy distance, and received their supply of salt from carts to the heavy loss of the Government revenue. This abuse was stopped by fixing an uniform duty on the basis of the rate paid for a pack. The average receipts from the Viramgám pans were in the six years ending 1826, £3300 (Rs. 33,000), yielding, after compensation made to the Desái and the Jhinjhuváda chief, a net revenue to Government of £1200 (Rs. 12,000).

Changes, 1869-1872.

In spite of the greater temptation to smuggling due to the enhanced value of salt, until in 1864, the railway to Ahmedabad, was finished, no change was made in the management of the Ran salt works. At that time there were five works on the Ran and fourteen on the sea coast between Cambay and Bassein. Mr. Dalzell, the deputy commissioner of customs, suggested that without increasing the price of salt to Gujarát consumers, Government might be saved much cost by closing the five Ran and the fourteen coast works north of Bassein, and establishing at the railway stations salt stores, leaving private enterprize to fill them with salt brought from Bassein and Bombay. Shortly afterwards Mr. G. W. Elliot, C. S., proposed that all the sea side salt works north of Bassein should be closed, that the railway should be extended as far as Pátri, and that *vadágra* salt should be brought by it on Government account from works on the Ran to a great store in Ahmedabad.

These rival proposals excited considerable discussion, and the papers were in 1869 forwarded to Mr. W. G. Pedder, C. S., who had been appointed to inquire into the general question of salt management in the Bombay Presidency. Mr. Pedder, with certain changes, supported Mr. Elliot's proposals, reduced the whole scheme to practical form, and showed its financial advantages. The project he finally submitted was; 1, that all sea side works north of Bassein should be closed; 2, that salt manufacture on the Ran should be concentrated at one large work near Khárághoda; 3, that a railway should be made from Viramgám to Khárághoda and joined with the salt works by bullock tramways; 4, that at fourteen stations on the railway between Pátri and Dáhánu salt stores should be established; 5, that, as soon as it was made, salt should be carried straight to the railway stores, none being kept at Khárághoda; 6, that at each store the selling price of salt should be the cost of making, together with the excise and the cost of carriage. This project was entrusted to Mr. C. B. Pritchard, C.S., and was carried out by him with the following changes; 1, the railway was taken into the heart of the works; 2, except at Ahmedabad, Broach, and Surat, where small stores were built, railway stations were supplied by a contractor, and a large store was built at Khárághoda, into which the salt was brought as soon as ready; 3, salt was sold at all stores and railway stations at one uniform price. The scheme as thus

amended was approved and sanctioned by Government and has, without any change, worked with marked success. The salt is now in demand at places as far away as Benares, the quantity sold has risen from 13,737 tons in 1873-74 to 41,645 tons in 1877-78, and the Government revenue from £68,324 (Rs. 6,8[illegible],240) to £244,242 (Rs. 24,42,420).

Khárághoda.

When Khárághoda was fixed as the site of the new salt works, it was a bare desert without shade, water, or shelter. Since then trees have been planted, a lake dug, and a village built. Soon after the works were opened, all the waste lands of the village were planted with trees. In some low-lying spots the bábul has grown. But the *limbdo*, Azadirachta indica, is the tree that has prospered best, and now covers with green large stretches of land near the village. The ponds of the villages near were at first the only source of water-supply. These ran dry in March, and as from the saltness of the under-soil wells could be dug only in a few places, water had to be brought twenty-two miles by rail from Viramgám. Now a large lake is all but finished, ensuring in most years a full store of water which will be led in earthen pipes to the railway station, the works, and the village. At first there were no houses or shelter for the workmen, now there is a village of about 500 souls. The village is carefully laid out in streets with one quarter set apart for the clerks and watchmen employed on the works. For the salt-makers' houses Government supplied timber and tiles, leaving the men to build the mud-walls and making the houses over to them on the payment of a sum of £3 (Rs. 30). A village office, *chora*, has been built and a dispensary with a trained hospital assistant supplied. A yearly house-tax of 1*s.* (8 *as.*) is levied and from the proceeds a staff of sweepers is kept up. The chief disease is fever, of which a very severe form is common when, in October, the low lands of the Ran are drying.

Salt Makers.

The salt-makers or Agriás were supposed to be a lawless unruly class. At first, before the site of the work was fixed, rivalries between the people of the different villages caused some ill-feeling. But since they have settled at Khárághoda, scarcely a crime has been committed. The workmen are paid at the rate of 2*d.* (1¼ *annas*) for 82 pounds (the Bengal *man*), five per cent being taken from their earnings to cover loss from wastage while the salt remains in store. Bad salt may be rejected, but all good salt is bought by Government and taken away as soon as made. Formerly the Agriás had to stand the risk of loss from floods, and to wait for buyers, and often their only means of disposing of their salt was to allow dealers a considerable drawback on the price fixed by Government. They bear the expense of loading the railway wagons, Government paying for the carriage of the salt to the store and for discharging the wagons. They also receive advances without interest from Government for the maintenance of themselves and their families during the salt-making season, and are thus relieved from the oppression of Vániás who used to lend them money at ruinous rates. Details of all money transactions between the Agriás and Government are punctually entered in receipt books kept by the Agriás. At the end of the first year outstanding advances amounted to £554 (Rs. 5540).

Chapter VI.
Manufactures.
SALT.

But next season all the workers came back and cleared off their debts.

During the eight salt-making months, October - May, three men on each pan can with ordinary labour make 160 tons, (4500 Bengal *mans*), yielding about £10 14*s*. (Rs. 107) to each worker. If they work hard they can earn more. In 1873 the outturn of several pans was more than 214 tons (6000 Bengal *mans*), and in one pan it was 276 tons (7739 Bengal *mans*), worth to each of the workers more than £20 (Rs. 200). Besides this their women and children earn something in the salt harvest season and the men from rough tillage in the rains. That middlemen may not come in and reduce the workmen's profit, the pans are let yearly and care is taken that they are let to actual workmen. To discourage the workmen from running into debt, besides the system of Government advances, the village grain-dealers are forbidden to let them run up scores at their shops. Since the works have been opened the Agriás, better fed, better clad, and better housed, have as a body greatly improved in condition and conduct.

Sinking the Well.

Except that as a rule only one crop is taken in the year the way of making the salt has changed little since 1826. The brine, found at a depth of from eighteen to thirty-six feet, yields about six times as much salt as ordinary sea water.[1] To reach the brine the first step is to sink a well. Most of the wells are round, about nine feet in diameter. They are dug through a top soil of black clay and occasional thin layers of sand until water is reached some nine or ten feet below the surface. This water is not the true brine but a mixture of rain and sea water that during the rainy season has filtered down. The digging then stops, and, to keep the sides from falling in, a hollow cylinder, *kantva*, of strongly wattled bábul boughs is introduced. Next, the brine lift is prepared, a thirty-feet teak rafter working on a strong wooden upright. To the long arm of the lever a twisted grass rope, with an earthen bucket at the end, is fastened, and balanced at the shorter end by a weight of sun-baked clay. By scraping loose earth from the surface into ridges along its four sides, a space is made for a pan and with two lifts at work the water is baled out and allowed to run over the pan. As soon as the well is dry, the salt-maker again sets to digging, leaving round the pit-bottom as a rest for the wooden cylinder, *kantva*, a narrow wall of solid earth. After digging some ten feet deeper, a second smaller cylinder is introduced; and, like a telescope slide, as the well deepens a third or even a fourth. When at last the brine-bearing stratum is reached a stout stake is driven deep into the soil and on drawing out the stake the brine spouts up in a column, filling the well to within ten or twelve feet of the brim. Three men, one to dig and two to raise the brine, are usually employed on each well, and according to its depth the work takes them from fifteen days to a month.

---

[1] The details are, sulphate of lime Ran ·25, sea ·14; sulphate of magnesia Ran ·82, sea ·23; chloride of magnesia, Ran 4·65, sea ·37; chloride of soda (salt) Ran 16·05, sea 2·71; other salts and iodides Ran 0, sea ·08; water Ran 78·23, sea 96·47.

Chapter VI.
Manufactures.

SALT.

Preparing the Pan.

When the well is ready, the work of preparing the pan begins. Three or four inches of the surface soil sodden by the waste well-water is taken away by large wooden mud-scrapers. The soil thus exposed is a stiff clay mixed in places with sand. Any bit with too much sand is dug out and replaced with good sound clay. More water is then lifted from the well, and as it spreads over the pan, any unevenness in the bed is at once seen. The outstanding parts are shaved off with an iron hoe until the whole is a rough level. Then the water is allowed to dry till only a thin film remains, and the work of puddling begins. Puddling is a hard and weary task. Three or four workers in a row, like mowers in a hay field, one a little behind the other, each with his heels close together, stamp over the pan in straight lines, first lengthways, then across, and then diagonally. When in this way the clay has been well worked the pan is allowed to dry. Another film of water is let in, and the stamping process again and again repeated till the bed becomes thoroughly water-tight. Its surface is then carefully beaten and levelled with wooden beetles. Some pans want as many as five separate puddlings and for others two are enough. The work takes four or five men from one to two months or even ten weeks. After the first year a single puddling is generally enough, and when the pans have been in use for ten or twelve years, nothing is wanted but to scrape away the loose mud washed into them by the rainy season floods.

Making the Salt.

The puddling lowers the floor of the pan some four or five inches below the ground level. A low wall of well-worked clay is then raised round all four sides of the pan, and the whole is left to dry. Meanwhile, between the well and the pan a small reservoir has been made to hold the brine as it comes from the well. After standing for a couple of days to clear, the brine is let into the pan four or five inches deep. In about a week's time the whole bottom of the pan is covered with a salt crust from a half to three quarters of an inch thick. The worker steps into the pan and with his feet breaks the crust into small pieces, and, until all the crystals are separated, scratches it with a wooden rake, *dantáli*. Then with the wooden mud-scraper he spreads the crystals evenly over the bed of the pan. A short time is allowed for the brine, disturbed and dirtied by these processes, to settle, and more brine is then let in. So long as the salt remains in the pan, it must be thoroughly raked and levelled with the hoe at least every other morning; otherwise the crystals become uneven in size and shape and as brittle as sea salt. Fresh brine must also be let in every day, and the pans must be kept filled to a height of at least three inches above the top layer of crystals.

Crop.

Only one crop of the best salt can be made in a season. If the work starts at the beginning of November, the salt will be ready by the end of the following March. By that time it covers the pan ten inches to a foot deep. To rake so large a mass of crystals and to keep brine enough in the pan is no easy task. Two crops are sometimes made. The first ready in January is good in quality though small in quantity. The second is larger but not so good as the

Chapter VI.
Manufactures.
SALT.

too quickly-formed hot weather crystals are uneven and hollow. The crystals of the best salt are nearly perfect half-inch or three-quarter inch cubes, clear and bright, and so close-grained and hard that they stand travelling specially well, and will even bear being thrown on a stone-floor with considerable force without breaking. When the salt is ripe, it is scraped into long ridges and the water drawn off. After standing for a few days to drain, the salt is carried away in baskets and piled in heaps. If a second crop is to be made, the pan must be thoroughly dried, and the bed levelled before fresh brine is let in. Women and children help in carrying salt and in loading it into railway wagons, but only men prepare the pans and wells and make the salt. The tools are very rough but well suited to their purpose. From their form and the way they are fastened to the lift rope the earthen brine buckets, as soon as they touch the troughs leading to the reservoirs, tilt over of themselves. The spikes of the rakes, tough bábul twigs, are so arranged that the workman can, to suit the depth of salt in his pan, alter their length at pleasure. The lift is as simple and useful a contrivance for raising brine as can well be devised, and the way in which water is used for levelling the pans is very ingenious.

Difficulties:
i, *brine-less clay.*

Several difficulties in the making of salt have lately come to light. In preparing fresh pans it has been found that brine or rather brine springs are not spread over the whole Ran. The black clay and sand, which form the Ran's upper crust and overlie the brine-bearing strata, are pierced in places by an impervious yellowish-red clay, locally known as *marud*, and wherever *marud* occurs the true brine seems to be entirely absent. This clay, perhaps at some time driven up by volcanic force, has in several places been dug to a depth of over forty feet, and a Norton's tube-well has then been driven in as far as it would go, but in no case was the clay pierced or a brine-spring struck. Its distribution is most irregular; it does not run in straight lines, but occurs here and there all over the salt works. It shows no surface sign. A well may be dug and brine found, but it is quite uncertain whether the clay will not be struck within ten feet on either side. Another risk lies in loss from blight,

ii, *Salt blight.*

raich. The first symptom of blight is an opaque film on the top of the water at the sides of the pan. This film gradually spreads over the whole pan; the salt crystals become covered with small spikes and feel greasy to the touch, and after a time, unless the disease is checked, they break into small particles, and the salt is spoiled. The disease is caused by overconcentration of brine, and the consequent deposition of magnesia. Of the salts present in brine, sulphate of lime or gypsum is the least soluble and the first thrown down. Chloride of sodium or common salt is the next to separate, and after evaporation has continued to a certain limit, sulphate of magnesium or Epsom salts and chloride of magnesium begin to fall. These salts melt very easily, and penetrating between the thin plates of the crystals of common salt, cause them to separate and break up as the water dries away. They also give the salt an intensely bitter and very unpalatable taste. In the first season of the new works (1872-73) this blight caused much damage. It was found to be due

Difficulties:

to the neglect of some of the workers to feed their pans regularly, and in the next year careful supervision very greatly reduced the evil. Where it did appear, the pan was at once thoroughly drained, and the salt allowed to dry. A free supply of fresh brine was then let in and took up any chloride of magnesium that might have been deposited, and by keeping up a good head of water until the salt was ready, all danger of recrystallization was averted. Dust storms are another source of danger. Beginning early in May they come up almost daily, the wind raising from the crust of the Ran a dense fog of the finest salt and magnesium dust. As much of the salt crop as is not removed from the pans and stacked before the dust storms set in is lost.

iii, *dust storms.*

How Carried Away.

The average outturn of salt during the five years ending 1877 has been 34,894 tons. To remove this great store of salt the pans, each 250 feet long by sixty feet broad, are arranged in parallel rows, with a railway siding running between each pair of rows. They are placed fifty feet apart with their shorter sides towards the tramway. On spaces rather more than ninety feet wide between the pans and the sidings, the salt when removed from the pans is dried and heaped conveniently for loading the wagons. Between each double row of pans a space 450 feet wide is left for wells and reservoirs and for the spoiling of the waste water used in cleaning out the pans. The works are surrounded by guard-rooms four hundred yards apart, each of them manned by three watchmen. The corner rooms are larger than the others with a guard of four watchmen and a petty officer. In the centre of the works is a guard-house with an inspector and a patrolling party of one petty officer and six men.

How Stored.

During the manufacturing season the demand for salt is met straight from the works. The salt is loaded into wagons at the pan's side and taken straight to the stores or railway stations at which it is wanted. At the close of the season the balance of the salt crop is taken to a large store built on high ground about two miles from the works and approached by a long embankment with a gradient of one in fifty. To fill the store the trucks are run up this embankment, the line supported by wooden trestles and masonry work running through the store twenty-one feet above the ground level. In emptying the stores the wagons are run along low level sidings sunk in cuttings deep enough to bring the floors of the wagons on a level with the floor of the warehouse. By this means neither in filling nor in emptying the store has the salt to be lifted, an arrangement that compared with stacking the salt in heaps represents for each wagon-load a saving of 1*s.* (8 *annas*).

The minor stores at some of the chief railway stations are plain sheds standing on plinths raised 3½ feet above the ground level, with doors on either side so arranged that when a train of salt trucks is drawn up alongside there shall be a door opposite to each truck. Trucks can thus be discharged along the whole length of the stores without any loss of time. Both minor and main stores are divided into compartments, and an account is kept of the quantities of salt put into, and taken from each compartment. Only a single compartment at each store is worked at one time, and as it is emptied

Chapter VI.
Manufactures.
SALT.
How Distributed.

its account is closed. A constant check is thus maintained on the officers responsible for the salt.

Both at the main and minor stores the salt is weighed by truck-loads over weigh bridges before being taken up into the store. It is weighed out to purchasers over platform scales adjusted every morning and tested several times a day. Salt for consignment by railway is issued to the public at Khárághoda only, and must be bagged in uniform quantities of 2⅛ cwts. (three *mans*) per bag. This arrangement greatly aids the testing of the weighments made by the weigh clerks, and serves as a useful check against fraud. A few bags can be taken out of a wagon at any station on the line, and the correctness of their weights ascertained without trouble or delay. The station-master at Khárághoda furnishes the superintendent of the works with a daily account showing the weights and destinations of salt presented to him for transmission by rail, and the superintendent personally examines all wagons laden with salt, before they leave the station.

The salt is sold at all stores and railway stations between Khárághoda and Surat at the uniform rate of 5*s.* 7½*d.* (Rs. 2-13) for 82 pounds (the Bengal *man*). Stations without stores are supplied by a contractor who is bound to keep at each station a stock of bagged salt sufficient to meet all demands. Buyers can either take bags and all, or the salt only. They can, if they please, send their own bags to Khárághoda and make their own arrangements for filling them, but they seem to prefer employing the contractor. The same contractor also provides bags, and despatches salt at fixed charges to railway stations in the Central Provinces, or he fills and despatches bags consigned to him for the purpose. Printed notices explaining all details of the arrangements and the selling price of salt have been distributed in every Gujarát village and published in the vernacular newspapers, and the assistant collector in charge occasionally visits each station and sees that the work is properly carried on. The contractor is prohibited from dealing in salt on his own account and so long as a large stock is kept at Khárághoda, as the right of limiting the quantities issued has been reserved, there is no fear of speculators buying the whole supply through the contractor and holding it with a view to raise the price of salt.

Finance Details.

The following statement shows, for the five years ending 1st June 1878, the quantity, the distribution, and the value of the salt produced in the Khárághoda salt works :

Khárághoda Salt Details, 1874-78.

Year.	Pans.	Salt made.	Salt Sold.				Revenue realized.
			Local use.	Central Provinces.	Rajputána and Málwa.	Total.	
		Tons.	Tons.	Tons.	Tons.	Tons.	£. s.
1873-74	254	31,836	5945	6744	1048	13,737	68,324 14
1874-75	281	37,151	10,465	9638	949	21,052	126,677 3
1875-76	265	35,799	20,093	12,895	2275	35,263	194,243 19
1876-77	260	31,612	18,639	12,750	2105	33,494	181,095 6
1877-78	245	38,069	19,273	18,918	3454	41,645	244,242 3
Total ...	...	174,468	74,415	60,945	9831	145,191	814,583 5

Chapter VI. Manufactures.

Saltpetre.

Over a large area in the west of Viramgám, chiefly in the villages of Jhinjhuváda and Pátri, earth is found suited to the manufacture of saltpetre. At the beginning of the century in these and the neighbouring Jhálávád, Limbdi, and Pátan villages, saltpetre was made in large quantities.[1] But on the introduction of British rule the widespread peace and the cheaper supply from Bengal put a stop to the Gujarát manufacture. The Vániás declared that, because of the murderous uses to which gunpowder was put, it was a sin to make saltpetre, and in 1825 except a little, by Musalmáns of the Bohora class, none was produced.[2] In 1830 the Revenue Commissioner Mr. Dunlop made an inquiry into the cause of the failure of the manufacture, and by the help of Mr. Vaupell, a gentleman of much intelligence and knowledge, supplied Government with a full account of the processes employed and of the state and prospects of the industry. The manufacture was then on a very small scale. The Vániás opposed the Bohorás in their attempts to increase the production and a Pársi who had come to Dholera with pots and other tools failed from ignorance of the proper kind of earth. Still the natives were willing to make saltpetre and, if a demand arose, at a shilling for five pounds (Rs. 4 the *man*) an unlimited quantity might be supplied. Bengal saltpetre though a little dearer and inferior to the best local variety was even in Limbdi able to compete with it. Unless Government came forward as a buyer there seemed little hope of reviving the industry.[3]

The manufacture is carried on only during the cold season. The earth used, of a dark-red mixed with white, becomes whiter the deeper it is dug. The richest patches are near villages in places frequented by cattle. When one plot is exhausted the workers change to another and keep moving so long as the cold season lasts. Except the alkaline earth and pure water nothing is used in the manufacture. The first process is to scrape off and gather the surface soil. When enough is gathered the earth is placed in large pierced earthen vessels called *gola*. Fresh water is then poured on the earth till the vessel fills. And as it strains through, the salt water is collected into smaller pots, *moria*, placed below. These are again emptied into deep iron pans, *karáv*, holding from ten to twenty-five *moriás* of the strained liquor. These iron pans are set over a cowdung fire and as the contents boil and evaporate common sea salt forms and as it forms is taken away in pierced iron ladles. The boiling goes on till as the water begins to crystallize it thickens into a jelly. It is then in the evening poured into shallow earthen vessels, *kunda*, and allowed to stand all night. In the morning the crystallized nitre is taken away and put into bags. In this state, called *ekvára* single or once washed from its large proportion of common salt and

---

1 The villages and towns where the earth is obtained are Bhoika, Survál, Darode, Umbji and Devgad in the Limbdi district; Bhadvána, Lakhtar, Halvád, Chokri, and Kákreji in Jhálávad; Jhinjhuváda and Pátri in Viramgám, and Sami and Munjpur near Pátan. Mr. Vaupell 4, 30th Nov. 1829.

2 Bom. Gov. Sel. X. 69.

3 Mr. Dunlop 251, 20th January 1830.

Chapter VI.
Manufactures.

other impurities, it is of no use. To refine it the saltpetre is again washed and purified in clear fresh water. It is then termed *bevda* or twice washed, and though somewhat inferior to the Bengal variety is used for making gunpowder. After a third purifying it is called *tevda* or thrice washed. This the best saltpetre made in Gujarát is principally used in the manufacture of the finest gunpowder called *ranjki* or priming powder. Besides these varieties at Sami and Munjpur a kind called *kalmi* charged with alum is much used for fireworks.

Pottery.

Ahmedabad pottery is better than most of the clay work of western India. The clay is shaped into many common and useful articles, toys, tiles, bricks, and pots for cooking and storing grain or water. To give the clay a light colour the potters use red ochre, *ramchi*, white-earth, *khadi*, and mica, *abrak*. Before being used these colouring materials are ground fine and mixed with water. White-earth keeps its colour, if, in baking, the smoke from the kiln is allowed to escape; but if the smoke is kept back the clay becomes black throughout. Red ochre always keeps its colour and when mixed with white-earth becomes pink. Mica, *abrak*, is used to give a finishing touch of dull gold. It is generally rubbed on before the wares are taken to market. A few potters glaze with litharge, *mudársing*, a semi-vitrified oxide of lead. This is burnt, powdered, mixed with water, and rubbed on the article before it is put in the kiln. Burnt copper filings or scrapings coated with litharge give a greenish tint. Jars for clarified butter, oil, or pickles are sometimes covered with lac. At other times they are polished by rubbing them either with a piece of bamboo or with a string of agate pebbles. A few of the Ahmedabad potters are Musalmáns, but the greater number are Hindus. The rural town and village potters make vessels for every-day use, stronger but not so well finished as those made in the city. The pipe bowls, *chalams*, of Dhandhuka, Barvála, Ránpur, and other villages bordering on Káthiáwár, are thought better than those made in Ahmedabad. Besides being sold in Ahmedabad at prices varying from 3*d.* to 1*s.* (2 - 8 *annas*), they are to some extent sent to Surat and Bombay and find a ready sale among all classes.

Gold Work.

The working in gold and silver is an important industry employing large numbers in all big towns and villages, especially in Dholka and Viramgám. The workers of the goldsmith or Soni caste are chiefly employed in making gold and silver ornaments, gold for the rich and part gold part silver for the middle class. The chief ornaments are brooches, pins and combs for the hair, noserings, earrings, necklaces, bracelets, wristbands, finger rings, waistbands, and anklets. The customer either brings the goldsmith the metal in the form of coins, or buys it in bars from an assayer, *choksi*. The goldsmith has seldom any store of metal or of ornaments, and, as his fondness for cheating is a by-word, the customer generally sends some one to watch the goldsmith when at work, or gets him to come to his house and make the ornaments there. Of late years, more than used to be the case, assayers have taken to keep ornaments in store. This change has to some extent lessened the demand for goldsmith's work.

Chapter VI.
Manufactures.

Silver Thread.

The making of gold and silver thread, used in brocaded silks and gold and silver cloth, employs a distinct class of workmen. Silver is cast into bars, about the thickness of the little finger and a yard long, and then reduced to wire, by a set of workmen called bar-drawers, *pásátániás*, chiefly Kanbis by caste. To reduce the size of the rod the bar-drawer fixes firmly between two uprights a metal plate about six inches long by half an inch broad, pierced with about forty holes of gradually lessening size. The holes are smeared with wax and one end of the bar is beaten to a point fine enough to pass through the largest hole in the drawplate. The point is then caught in a heavy pair of pincers, and fastened to a strong chain which is passed round a wooden barrel three feet long and about a foot across, moving in a frame sunk below the level of the ground. From the outer edge of the barrel, at either end, stands out a circle of wooden bars like the spokes of a felloe-less wheel. Laying hold of the ends of the spokes, by the help of their leverage the workman drags the bar through the holes of the drawplate, a matter at first of much labour. As it is forced through the different holes the bar gradually stretches till, when all the holes have been passed, it comes out a fine wire. To make it into thread the wire is passed to the wire-drawer, *tánia*, a Kanbi by caste who working after the same fashion as the bar-drawer, only with lighter tools and a finer drawplate, generally turns out six to eight hundred yards of thread from half an ounce (1 *tola*) of silver. So great is his delicacy of touch that if desired the *tánia* can draw out half an ounce (1 *tola*) of silver into 2000 yards of thread, a feat all the more wonderful that for boring the holes in his drawplate the workman has no finer tool than the file-pointed end of an old umbrella steel. Next, to flatten the wire, it is wound upon bobbins and handed over to the stamper, *chapadia*, generally a Kanbi by caste. Laying ten of the bobbins side by side in a frame so that the threads may roll easily off, he passes the threads through a glass ring fastening their ends to a reel held in his left hand. Slowly turning this reel he draws the threads gently through the glass ring and with a hammer held in his right hand, as the threads pass over a small highly-polished steel anvil, gives them quick sharp blows so unfailingly even that they pass on, of one uniform flatness.

Gold Thread.

To make gold-thread, ingots of gold are melted and beaten into leaves about a yard long and two inches broad. With every care that all is clean, the leaf is pressed round a silver bar and bound to it with a strong hemp cord. The bar is then placed in a bed of live charcoal and, after lying there for about ten minutes, is taken out and beaten with a heavy hammer. After a second heating the bar is again beaten, and after a third heating, it is allowed slowly to cool. It is then ready to be made into wire and is drawn out and flattened like the silver thread. So thoroughly have the two metals been welded that the wire appears to be of gold, showing no sign of the silver. Before it is worked into fabrics the gold wire is wound on specially prepared silk thread. To make this silk thread, two frames, one about three the other about eight feet high, are, in an open space, set about thirty yards apart. The cross beams of each frame are furnished with sets of seven or eight wooden pegs. The workman, *asára*, generally a Kanbi by caste, from

Chapter VI. Manufactures.

Gold Thread.

a reel of silk held in his hand fastens the ends of the filaments to one of the pegs of the lower frame, and, walking along the open space, lets the silk gradually unroll. When the higher frame is reached the workman passes the threads over a peg, snaps them, and, from a fold in his dress, taking a small malet-headed spindle, fastens the ends of the threads to the stem of the spindle. This he does for each of the seven or eight sets of pegs. The threads, which at first hung loosely between the two frames, are now tightened by drawing the spindle heads towards the ground. Then by a sharp twist of the hand, the spindles in turn are set rapidly in motion until they work themselves up to the cross beam of the frame. The thread is then snapped from the spindle, the ends tied, and the whole carried to the dyer. On their return the threads are again stretched and all roughness removed by rubbing them with a thin bright steel rod. The silk is then taken to the gold-thread winder, *vintnár*, and wound on a small heavy-headed spindle. The end of the thread is by the help of a hooked stick passed through a glass ring fastened in the ceiling, drawn down, and tied to the stem of a second spindle shaped like the first. The reel of gold wire is next placed where it can freely unwind and the workman, seating himself on a high three-legged stool, fastens the end of the gold wire to the silk thread on the stem of the empty spindle, and with a violent rub along the calf of his leg sets it spinning with great speed. The thread as it winds is fed with gold wire until the spindle has twisted itself as high as the workman can easily reach. It is then drawn down, a twist given to the silk thread, and the gold-thread spindle set violently in motion and as before another yard or so of gold thread is spun. These industries are found only in Ahmedabad. The workmen chiefly Hindus of the Kanbi caste are steady, thrifty, and sober, though not overhonest.

Tin Foil.

At rich and middle-class marriages and other rejoicings the lintels and side posts of the house-door are covered with strips of yellow tin foil. To make this tin foil, blocks of tin brought from Bombay are hammered into leaves at the rate of sixteen scores of six-inch leaves to one pound, 40 *tolás*, of metal. To colour it yellow the leaf is laid on a piece of earthenware over a dish of live coal and smeared with yellow sealing wax. The leaves sell at the rate of 200 for 2*s*. (Re. 1). They are used for ornamenting images of the gods. They sometimes have a rough pattern printed on them from a lead block. Except a few Musalmáns the workers are Hindus of the Mochi caste. The industry is prosperous.

Gold Foil.

To make gold foil, gold leaf is bought from a goldsmith and placed between sheets of fine leather, bound in the form of a small book. This book is placed on a stone and beaten with a heavy-headed iron hammer until the leaf spreads to about four times its original size. The leaves are used by Musalmán beggars and other hemp-smokers. The hemp, *gánja*, is laid in the bowl of the pipe, the gold leaf is stretched across the mouth of the bowl, and on the leaf fire is placed. The foil is sometimes also plastered over sweetmeats. These workers, called *varakgars* or leaf makers, are Hindus chiefly Mochis and a few Musalmáns. The industry is fairly prosperous.

Chapter VI.
Manufactures.

Electro-plating, rasán.

Electro-plating is to a small extent carried on in Ahmedabad. The workers, called platers, *rasániás*, are of the shoemaker, *Mochi*, caste. They plate with silver on copper, chiefly horse trappings for marriages. Formerly the copper was covered with silver leaves, but electro-plating has supplanted the old method. According to the old system, if a silver ornament was to be plated with gold, the silver was heated, taken out of the fire by the help of a pair of pincers and covered with gold leaf. The gold leaf was then worked into the inequalities of the article by a style pointed with Cambay carnelian. It was then handed over to another workman who with a finer style smoothed the surface and polished the gold. Never practised by goldsmiths, this work has always been in the hands of Mochis. The ornaments are brought by the person who wishes to have them plated.

Tin-Plating.

Tin-plating is to a large extent carried on in the city of Ahmedabad, and on a smaller scale in the country towns. The workers, called tin-platers, *kalaigars*, are Musalmáns; a few of them are Hindu coppersmiths, Kansárás. They plate with tin on copper and brass vessels for household use. The method employed is very simple. The vessel to be plated is scraped with a nail-like iron tool, and the tin boiled and mixed with ammonia, *navságar*, is laid on with a cloth and then polished with sand and ashes. This industry is prosperous as all Musalmáns and Pársis and most Hindus have their vessels tin-plated.

Leaf-Printing.

To print gold and silver foil patterns on cotton and silk, the cloth is stamped with a deep-cut handblock dipped in gum. The cloth is covered with a layer of gold or silver foil and then sharply rubbed by a polished wooden bar, *mora*, about eight inches long, an inch round at each end, and two inches round in the middle. In the middle on one side of the wood a hollow is made, and in it a large polished carnelian stone is set and fastened with plaster. The rubbing takes away the foil from the surface of the cloth except where it has been fastened by the gummed pattern. There the foil is so thoroughly worked into the cloth that it may be roughly used without giving way. This industry is in a fair condition. The workers are chiefly Mochis.

Idol Ornaments.

Another prosperous Ahmedabad industry, entirely in the hands of Mochis, is the making of ornaments for the gods. The ornaments are of paper, cut into various shapes and covered with pieces of differently-coloured tin foil or the eye from a peacock's tail feather. A great day for the sale of these ornaments is the *Gokal Ashtami* fair, the birth-day of Krishna in the month of Shrávan (August-September). Another article much in demand on that day is enamel. For this work china is powdered fine, rubbed on pieces of heated metal, and melting with the heat forms an enamel. One of the chief enamelled articles are gods' eyes, almond-shaped pieces of white enamelled silver with a black pupil painted in them.

Copper and Brass.

Large quantities of copper and brass articles are made in Ahmedabad. Besides the ordinary house pots and cups manufactured in most district towns, the Ahmedabad coppersmiths, Kansárás, make very graceful and delicately cut brass-screens. Their specialty

Chapter VI. Manufactures.

is the betel leaf holder, *pándán*, a small box of the most delicate brass tracery. Their wares belong to two chief classes; of copper, domestic pots, boxes for keeping jewelry, and inkstands; and of brass, boxes for keeping sweets and spices, rings, lamps, idols, chains, bells, tongs, and betel holders, *pándáns*. Besides the Kansárás whose special calling it is, some blacksmiths, Luhárs, work in brass and copper. The raw material, both copper and brass, is brought from Bombay by regular metal dealers, Musalmáns of the Shia or Dáudi Bohora sect, and sold by them to the coppersmiths. Much of the brass is made in Ahmedabad by the coppersmiths from copper and zinc in the proportion of four parts of copper to three of zinc. At present copper work shares in the general dulness of trade.

Iron.

Iron-ware articles are not made in any large quantity. The chief are knives and field tools, most of them made in the country towns, iron buckets and cooking vessels used chiefly by town Musalmáns and Pársis, and nails, screws, hinges, and other things required for house-building, and locks made only in Ahmedabad and from it distributed over the district. The iron brought from Bombay by Musalmán Sunni and Shia Bohora and Hindu Vánia merchants is sold in retail to the ironsmiths, Luhárs. The Ahmedabad Luhárs are a clever and hardworking class of men. Those of Modása are famous for their easy-chairs and cots. The manufacture of hardware has suffered severely from European competition. At the same time the introduction of machinery has opened to Luhárs both in Ahmedabad and Bombay a wide and well-paid field of employment.

Wood.

Ahmedabad carpenters have long been famous for their skill in carving blackwood. Many of the best have left Gujarát for Bombay. But in Ahmedabad the finest specimens of this class of work are still to be found. Next to the city carvers, and in some respects with an even higher local name, are the Dholera carpenters. This, before the days of railway, was the chief timber mart in the district. Here Luvána and Vánia merchants bringing logs of teak from Thána, and of blackwood and sandalwood from the Malabár coast, sell them to the district carpenters, who work them up into chairs and tables, cots and cradles of English fashion, and into handsome well-finished brass-bound boxes much sought after in Káthiáwár and even in Ahmedabad city.

Wooden Bracelets.

Wooden bracelets are, to a small extent, made in Ahmedabad and in rather larger quantities in Modása, Dholera, Dholka, Viramgám, and other country towns. They are worn by the lower orders of Hindu women and by poor Musalmán women of Hindu descent.

Turning.

In Dholera and still more in Modása, the turning of cot and cradle legs and small boxes is an active industry. The small boxes, *dabbás*, varying in size from two inches to one foot in height, and 1½ to eight inches round, are used, the small ones to hold opium, and the large ones for women's ornaments. The Modása boxes, the best in the district, are in demand from all parts of Ahmedabad, as well as from Káthiáwár. Modása-turned cots are also sent to Ahmedabad and other towns, and used by rich and middle class Hindus and Musalmáns.

Chapter VI.
Manufactures.

The turners of Ahmedabad, Dholka, and Viramgám also make cots, cradles, children's toys, and, to a small extent, bangles. The cots and cradles are used by all classes, the bangles by high caste Hindu women. Almost all these articles are quaintly coloured with stripes of red, yellow, black, and white wax. Cots, cradles, and children's playthings find the greatest sale on the *Gokal Ashtami* fair in the month of Shrávan (August-September). Except a few Musalmán families, the turners, *Kharádis* or *Sangádiás*, are Hindus. The Musalmán turners make to order and sometimes have for sale ready made chessmen and counters, *nard* or *got*. Turner's wares are in good demand. The craft has not suffered by European competition.

Cotton Thread.

The spinning of cotton thread is a very extensive industry in Ahmedabad and other towns and big villages. The spinners are chiefly poor Musalmán and Hindu women. The thread, *sut*, is used by native weavers for rough work. The raw material is the produce of the district, bought by cotton spinners from farmers and sold by retail or given to women to spin. The hand spinning of cotton thread has suffered much from the competition of European and still more of local steam spinning factories.

Cotton Cloth.

The weaving of cotton cloth is an important industry. At Ránpur a few Bohorás and Táis weave from English yarn cloth of a rather fine texture, finding a ready sale among the surrounding Girásiás and Káthis. At Dholka from the same materials Hindu Khatris make women's robes, *sádis*, of much local repute for steadfastness of colour, and in Ahmedabad, although to a less extent, rich Musalmán, Momna, and Hindu Khatris make very good silk-bordered waist cloths, *dhotis*, robes, *sádis*, scarfs, *dupattás*, and smaller waist cloths, *chalotás*, which are sent to Gujarát, Bombay, and Khándesh. With these and a few other exceptions the only hand-woven cloth is made by Dheds, a few of whom are found in almost every large village. Much of this cloth is now made of English or local mill-yarn. Dhed-woven cloth, though from differences of shape known as *khádi*, *chofál*, and *doti*, is all of the same coarse strong texture. Since the beginning of British rule hand loom weaving has greatly declined. In 1820[1] English made cloth was a new article in Ahmedabad trade. But so rapidly did it make its way that by 1825 even in the best mart of the district the consumption of superior country made cloth had become very inconsiderable.[2] The coarse hand woven cloth on account of its much greater strength held its own with the cheaper sorts of European cloth. But the produce of the local mills has greatly affected the demand for this class of hand woven goods.

Steam Factories.

Though a large section of hardworking craftsmen are seen to have suffered from the competition between hand and machine looms, Ahmedabad has not allowed its old cloth industry to die

---

1 Mr. Dunlop, 29th August 1820.

2 Bom. Gov. Sel. X. 60. A doctor Gilder, senior partner in the firm of Gilder De Souza & Co. is said to have been the first to introduce European madapollams and yarn into this part of Gujarát. Briggs' Cities of Gujráshtra, 317. This class of goods still goes by the name of *Doctori kapda*, or doctor's cloth.

Chapter VI.
Manufactures.
Steam Factories.

out. It has now (1879) four factories with engines of 250 horse power employing 2013 hands and paying in wages a yearly sum of about £19,777 (Rs. 1,97,770). In order of age these mills are (1), the Ahmedabad Cotton Mills Company opened in June 1861 with a capital of £65,400 (Rs. 6,54,000) divided into 654 shares of £100 (Rs. 1000) each. The machinery driven by engines of 100 nominal horse power, works 14,740 mule and 7500 throstle spindles, and 303 looms. In 1877-78, 1,704,850 pounds of cotton were worked into yarn up to 20 S. count worth £17,772 (Rs. 1,77,720) and coarse waist cloths, *dhotis*, and long cloth worth £60,135 (Rs. 6,01,350). In 1878 about 900 hands were daily employed and during the year £9228 (Rs. 92,280) were spent in wages; (2) the Bechardás Mill, opened in June 1867, is the private property of Ráo Bahádur Bechardás Ambáidás, C.S.I. The machinery, driven by engines of sixty-five horse power, works 15,000 spindles and 172 looms. In 1877-78, 993,112 pounds of cotton were worked into Nos. 10 to 30 water and mule twist worth £16,680 (Rs. 1,66,800) and into T-cloth and cloth for waistcloths and women's robes worth £24,215 (Rs. 2,42,150). In 1878 about 500 hands were daily employed and during the year £5877 (Rs. 58,770) paid in wages; (3) the Ahmedabad Ginning and Manufacturing Company, Limited, owns a spinning mill of 9120 mule spindles driven by a steam engine of 25 horse power. It was opened on 6th December 1877. The Company has a capital of £35,000 (Rs. 3,50,000), divided into 350 shares of £100 (Rs. 1000) each. In the year ending 31st December 1878, 720,000 pounds of cotton were worked into 20 S. yarn worth £22,930 (Rs. 2,29,300). In 1878 about 250 hands were daily employed and during the year £2400 (Rs. 24,000) were spent in wages; (4) the Gujarát Spinning and Weaving Mill was opened on the 5th May 1878, with a nominal capital of £80,000 (Rs. 8,00,000) held in 800 shares of £100 (Rs. 1000) each. The machinery, driven by a pair of sixty horse-power engines, works 6400 mule and 5168 throstle spindles and 209 looms. From 5th May, when the mill was opened, to 31st December 1878 about 384,000 pounds of cotton were worked into yarn 10 S. to 25 S. count and coarse cloth for *dhotis* and long cloth worth £11,909 16*s*. (Rs. 1,19,098). During the same period 363 hands were daily employed and during the whole time £2272 (Rs. 22,720) were spent in wages. The cotton at present spun and woven in the Ahmedabad steam mills comes chiefly from Káthiáwár, Viramgám, Kadi, and other Baroda marts. Small quantities are also received from the Broach district. There is some export to Bombay and Central India. But the bulk of the demand is local, for Gujarát and Káthiáwár consumption. Except a few Bráhman men employed as bundlers, Vánia men as reelers and Kanbi men as weavers, the workmen are Musalmáns, Kolis, Maráthás, Pardesis, Bávchás, Vághris, Márvádis, and other labouring classes. There are many Musalmáns "minders and piecers" and variously employed. Both men and women are clever workers, but they are not attentive or regular in their wavs and as a rule waste their wages. In the Bechardás mill one of the Kolis has risen to the position of an overseer on a monthly salary of £2 10*s*. (Rs. 25). The Maráthás

and Pardesis are generally good workmen; most of them take to carding. The class which of all others seems to benefit most are the Vághris. Their condition was one of extreme poverty formerly, supporting themselves by begging. But whole families come to the factories and many are now well off. Some families are known to have laid by money investing it in the purchase of ornaments and in building better houses.[1]

Dyeing.

Dyeing is an extensive industry, following the lines of most rivers except the brackish Bhogáva, and the early-dry Bhádhar. Outside of Ahmedabad city the chief dyeing centres are Vághpur and Orán on the upper course of the Sábarmati, Modása on the Májham, and Barvála on the Utávli. Dyeing prevails also to a great extent in Viramgám and to some degree in Dhandhuka and Ránpur. In Viramgám pond water; and in Dhandhuka and Ránpur the water of wells dug in the Bhádhar bed is used. The chief colours dyed in country towns are indigo, dark blue, and black; lighter shades are dyed in the city. Except a few city Musalmáns, the dyers, *rangrez* or *rangárás*, are all Hindus, generally of the Bhávsár caste. The industry is in a good condition.

Calico-Printing.

Calico-printing is a craft of some consequence in Ahmedabad, Viramgám, and Modása, and to a less extent in other country towns. The printed cloth is used locally and sent to Siám. Formerly there was a very large demand for Ahmedabad calicoes, but their place has to a great extent been taken by European prints. To print the cloth it is at first dirtied and then washed either by the workmen themselves, Hindus of the Bhávsár caste, or by washermen, *dhobhis*, and then dipped into the dye light or dark blue, black, or yellow as required. It is then dried in the sun and by means of wooden blocks the design is printed on the borders. The Ahmedabad city Bhávsárs, numbering about 700 families, are a steady and hardworking class most of them men of some capital owning from £500 to £2000 (Rs. 5000 - Rs. 20,000).

Steam-Printing.

A steam print-work, started by a joint stock company at a cost of £25,000 (Rs. 2,50,000), was finished and opened for work in 1878. About a mile to the south-west of the city on the left bank of the Sábarmati from which it draws its water-supply, the factory, in three separate buildings, has all the appliances of an English steam print work for singeing, bleaching, printing in four colours, drying, finishing, and folding. Its prints are said to be very good for simple patterns with one colour but not so good for two colours. Soon after opening the work was closed. But this was from some hitch in the management, not from any failure or flaw in the machinery and it is expected before long to be again at work.

Paper.

Ahmedabad has long been famous for its paper. Thirty years ago (1848) about 800 men and boys were daily employed in the paper works. At present (1878) the number is estimated at 600. This craft, like many other Ahmedabad industries, is a close

---

[1] The steam factory details have been kindly supplied by Ráo Bahádur Bechardás Ambáidas, C.S.I., who has furnished information about the city manufactures.

Chapter VI.
Manufactures.

monopoly. The workers are Musalmáns, and the trade is regulated by an association called the paper guild, *kágdini jamát*, whose members are bound by common interest to keep secret the mysteries of their craft. The workers do not trade in paper. They are generally employed by rich Musalmáns, chiefly of the Sunni Bohora sect. The average yearly earnings of a family, for the women work as well as the men, vary from £10 to £20 (Rs. 100-Rs. 200). The employer supplies the material, chiefly old bags and sacking, much of it brought by Vanjárás from Márwár and mixed with pieces of damaged European paper. The paper of which there are five kinds, *sáheb-kháni*, *khambháti*, *morádsháhi*, *gásia*, and *kharchi*, is made in sheets from 17¼ to 29½ inches long and from 16 to 27¾ inches broad. The price of a sheet varies according to size and quality from ⅛*d.* to 2½*d.* (one pie to 1½ *annas*). Under foreign competition paper-making has of late years declined. At present (1878) Ahmedabad paper is used chiefly in Government vernacular registers, in native states, and by native traders, whose ways of book-keeping and book-binding require tough and closegrained paper. Besides over most of the Bombay Presidency, Ahmedabad paper goes to different parts of Central India.

Snuff.

Snuff is made for local use at various places in the district, the best coming from Viramgám. This Viramgám snuff is made from Nadiád tobacco, mellowed by four years' keeping. In making snuff the stalks are drawn out, the leaves dried in the sun, and freed from sand by shaking in a sieve and soaking in water from five to ten days. When thoroughly dried, they are again beaten to dust by sticks and twice sifted through a coarse cloth. To avoid waste this pounding and sifting goes on in a closed house, and so trying is the dust that none but strong men can stand it. The cheaper snuffs are made by grinding the leaf, stalk and all, in a mill.

Oil Pressing.

Besides in Ahmedabad city, oil-pressing is carried on chiefly in Modása, Viramgám, and Dholka, each the trade-centre of a seed-growing country. The Modása oil-pressers crush *mahuda*, Bassia latifolia, berries for the Kapadvanj and Parántij soap-boilers, and like the Ahmedabad oilmen send the oil of cheap gingelly seed, *tal*, Sesamum indicum, as far as east Káthiáwár. Viramgám is supplied with castor and sesamum seed from the villages round, and with rapeseed from Pátan, though since foreign demand has raised its price, little rapeseed is now locally ground. The surplus Viramgám oil goes to Jhálávád.[1] At Dholka the raw materials are poppyseed, *khaskhas*, gingelly, and castor seeds.

Soap.

During the last fifty years a large soap-making industry has sprung up in Parántij. The raw material is at hand and cheap. Fuel and *mahuda*, Bassia latifolia, berries are brought from the hilly country to the north; soda, *us*, from Vághpur, a neighbouring village, and lime from near Modása. It is estimated that 74 tons (4000 *mans*) of oil are yearly boiled into 214 tons (12,000 *mans*) of soap. Most of the soap goes to Ahmedabad and from there some

[1] This reverses the state of things in 1824, when oil went from Káthiáwár to Viramgám. Collector's Report, 12th May 1824.

Chapter VI.
Manufactures.

is sent to Bombay. This industry is chiefly in the hands of Sunni Bohorás.

Leaf Plates.

The leaf dishes used at caste-feasts are made by village Bráhmans. Of two kinds, plates, *patrávlis* and cups, *dadiyás*, the dishes are brought into Ahmedabad in bundles of 200 plates and 100 cups and are sold according to size, the plates at from 3*d.* to 6*d.* (2-4 *annas*) the hundred, and the cups at from 1½*d.* to 2¼*d.* (1-1½ *annas*). Made of the dry leaves of the *khákhar* tree, Butea frondosa, fastened together with small slips of bamboo they keep fit for use for two years. This industry is confined to the Daskroi villages near the city, where only they find a sale.

Silk.

Of the silk products for which Ahmedabad was famous, both under its own kings and under the Moghal viceroys, some account has been given under the head of trade. The chief excellence of Ahmedabad silk work lay in the bright colours of its plain silks, and in the strength of its brocade. Under the Maráthás (1755-1817) the silk, taxed when raw, taxed as it passed through each process, and again taxed when ready for sale, was so weighted in the struggle with foreign silk that its manufacture ceased to pay and almost died out.[1] During the first year of British occupation (1818) the import of raw silk amounted to 11 tons (300 Indian *mans*), during the second year it was 37 tons (1000 Indian *mans*),[2] and in 1847 it was 109 tons (2955 Indian *mans*).[3] In 1868 the next year for which returns are available it had fallen to 77 tons (2080 Indian *mans*) and in 1874 had again risen to 100 tons (2703 Indian *mans*). Since then there has been another serious fall to 65¼ tons (1762 Indian *mans*) in 1877 and 41½ tons (1118 Indian *mans*) in 1878. Several causes would seem to have combined to bring about this fall in the import of raw silk: the scarcity of silk and consequent high prices in 1876 and 1877; the local high grain prices and dulness of trade; increased foreign competition; and a change in customs, the Gujarát and Káthiáwár chiefs beginning to give up the use of brocades and the women of the Vánia and Bráhman castes taking more and more to Chinese instead of Gujarát silks.[4] China is the chief source of supply, but some silk comes from Bengal, some from Bussorah, and of late years some from Bukhára. The silk is brought to Ahmedabad chiefly in Bhádarva and A'so (September and October) and almost entirely by rail. The importers called *Tágiás* are Hindus of the *Leva* and *Kadva* Kanbi castes and Vániás. Some of them are men of capital, owning from £500 to £20,000 (Rs. 5000-Rs. 2,00,000), who buy from Bombay dealers and give out the silk to Ahmedabad

---

[1] Mr. Dunlop, 28th December 1817.
[2] Records of the Collector of Ahmedabad.
[3] Bom. Gov. Sel. V. 82.
[4] In addition to these the change in the administration of Baroda consequent on the fall of the ex-Gáikwár Malhárráo has dealt a severe blow to the silk and cotton industries of Ahmedabad. The Gáikwár bought annually, partly for the use of his palace and partly to be given in presents, silk goods including brocades to the value of about £50,000 (five *lákhs*) and cotton goods, turbans, waist cloths, *dhotars* &c. to the value of about £30,000 (three *lákhs*). The estimated profits out of orders were for silk goods about £5000 (Rs. 50,000) and for cotton goods about £3000 (Rs. 30,000). Note by Mr. J. F. Fernandez, Deputy Collector.

Chapter VI. Manufactures.

workmen, pay them for their labour, and sell the goods when they are finally worked up. Besides to these silk dealers and silk traders the making of silk goods gives employment to a large number of people. These workers may be divided into three main classes, weavers and dyers of plain silks, chiefly Hindus of the Khatri, Kanbi, and Bhávsár castes and Musalmáns; weavers of brocade with patterns wrought in the silk or woven with gold or silver thread, chiefly Kanbis and Khatris; and silk printers, chiefly Bhávsárs, Khatris, and some Musalmáns. Between the time it comes to Ahmedabad in raw hanks and is ready for sale either as plain or brocade cloth, the silk passes through the hands of eleven separate sets of workmen; the reeler, *kholnár*; the sorter, *chánnár*, the spinner, *kántnár*; the warper, *tánnár*; the raiser, *uchádṇár*; the dyer, *rangári*; the sizer, *pánár*; the heddle filler, *rách bharnár*; the joiner, *sándhnár*, the thread arranger, *bhánjni bharnár*, and the weaver, *vannár*. These are almost all Hindus, Kanbis by caste. The reeling and sorting are left to women and girls; the other processes are done by men.

Reeling.

On reaching Ahmedabad the first process through which the silk passes is reeling. The pale-yellow hank of raw silk is placed on a bamboo cage about three feet round with a central rod about two feet long. The winder, generally a young girl of the Kanbi caste, sits on the floor with the bamboo cage on her right hand side, and in her right hand a reel to which the end of the hank is fastened. Setting the central rod of the bamboo cage against her left foot she spins rapidly by twisting the end of the rod between two of her toes, and as the threads are set free winds them on the reel held in her right hand.

Sorting.

As the threads of raw silk vary from coarse to fine, the different sorts have to be wound on different reels. For this purpose the reel of raw silk is handed over to a sorter, *chánnár*, who has by her side five reels, one for each of the five varieties of silk. After finding its quality the sorter fastens the thread to its proper reel. Then pressing the full reel against her left foot and allowing the thread to pass through her fingers, so long as its quality remains unchanged she keeps winding it round the reel in her right hand. When there is any change the thread is at once snapped and according to the quality of the next part of the silk a fresh reel is chosen. The sorter joins the threads with much neatness and speed by placing the two ends in her mouth and tying them with her tongue.

When the silk has been sorted it is ready to be spun. The spinner, *kántnár*, after winding the thread from the reel on to a bobbin, transfers the bobbins to a machine corresponding to the throwing machine in European silk factories. This consists of two wooden frames about three feet high and 2½ feet apart, one of them five and the other three feet broad. The broader frame work is divided by an upright wooden bar furnished on either side with alternate rows of seven pegs or pins placed parallel to the horizontal bars of the frame. On these pins the bobbins are placed, their threads being each carried through a separate glass ring set on the inner side of the frame, then through rings fastened to a light wooden square about two feet broad hung between the two chief

frames, and finally fastened to separate bobbins, which in two parallel rows of seven each, are placed vertically in the bars of the smaller frame. Each of these three parts receives a distinct motion from a wheel about five feet in diameter, attached to the two chief frameworks by beams of wood and so forming with them one entire machine. A string placed on the tire of this wheel works the bobbins set on the horizontal pins of the inner and broader frame work; an arrangement connecting it with an endless rope, passed round that part of the nave of the wheel to which the handle is fastened, gives a slow transverse movement to the central wooden square, while a second rope encircling the other end of the nave keeps in motion the vertical bobbins of the outer frame.

Warping.

The threads are next handed over to the warper, *tánnár*. Under a wooden beam, with twenty rings let into it, is laid a tray with twenty bobbins. About four feet from the bobbin tray is the warping frame, *tăna*, two upright bars of wood about eight feet high and each with a row of nine pegs. The warper passing a thread from each bobbin through the rings under the beam, above the bobbin tray, and again through a set of rings placed close together in a bar of wood about a yard long, fastens the ends of the thread to the lowest peg on one side of the warping frame. Then, taking in his left hand the bar of wood with the threaded rings, and holding a rod in his right hand, the warper walks in front of the frame and with the end of his stick passes the threads over and under the pegs, backwards and forwards, until enough has been drawn out to form the warp.

The silk is then tied into a large hank and handed over to a raiser, *uchádnár*, who stretches out the threads and arranges them for the warp. Next the silk is sent to the dyer, *rangári*, who boils it in lime and soda, *khár*, steeps it in alum water for a night, washes it in the river, washes it a second time, and last of all dyes it.

Sizing.

The dyeing over, the silk goes back to the *ucáhdnár* to be dressed, and is next sent to the sizer, *pánár*, who stretches out the threads and stiffens them by brushing in a dressing of size. Next the warp has to be made ready. This includes three processes, heddle filling, joining, and arranging. The heddle filler, *rách-bharnár*, according to the pattern passes threads through the loops in the cords of the different heddles and among the teeth of the reed, *phani*; when this has been done the joiner, *sándhnár*, fastens the ends of the warp threads to the heddles by tying the corresponding threads of the warp to those passed through the reed by the heddle filler, and finally through the whole length of the warp the *bhánjni bharnár* arranges the threads in accordance with the position the joiner has given.

Weaving.

When the warp is ready it is carried to the weaver's house and the loom is set in order. The weaver, *vannár*, sits in a hole about two feet square dug into the ground when the room is in the lower story, or in a wooden box let into the floor when he works in an upper room. Immediately before him is the cloth-beam on which the woven cloth when finished is wound; then the portion of the web at which the weaver is working; next the reed hung from the ceiling and enclosed in a wooden frame heavy enough

Chapter VI. Manufactures. Silk.

to force home the threads of the woof; and then the heddles varying in number according to the pattern, fastened to a beam in the ceiling and communicating with treddles worked up and down by the weaver's feet. Behind the treddles are horizontal rods placed between the alternate threads of the warp to prevent them from becoming entangled, and finally there is the warp-beam on which the warp is wound. The whole is kept tight by being tied to a rope which, passing round a pulley in front of the warp-beam, is fastened to a peg near the weaver's side and can be gradually slackened as the web is wound in.

To weave silks with borders, and to weave brocade, a more complicated arrangement of the loom is necessary. This apparatus, a kind of inverted heddles, called the pattern *naksh*, is hung above the warp immediately behind the heddles, the other end of the cords being fastened to a horizontal band running below the warp. Like the cords of a heddle the *naksh* strings where they cross the warp have loops through which certain of the warp threads are passed. But instead of getting an up and down motion from treddles pressed by the weaver's foot the *naksh* is worked from above. A child seated on a bench over the warp inserts a rather thick wedge-shaped bar of wood and by giving it a twist, draws up the cords attached to those of the threads of the warp which, according to the pattern, are at any time to appear on the surface of the cloth. The design, *naksh*, is arranged by the weaver who adds to the variety of the pattern by working different colours of silk into the woof, using also in the case of the richer cloths threads of silver and gold. The brocade weavers are generally Hindus of the Kanbi and Khatri castes.

Printing.

Silk is printed by knotting. To knot silk the undyed cloth is sent to a draughtsman, *chitarnár*, who divides the whole surface into one-inch squares. Then it goes to the knotter, *bándhnári*, generally a girl, who picks up a little of the cloth at each corner of the square and ties it into a knot, the number and position of these knots or rosettes fixing the character of the pattern. After being knotted, the silk is handed to the dyer, who dips the whole into the colour required for the ground of the pattern. The knots are then unfastened and the silk that was tied up in the knots shows in little white circles, where sometimes yellow centres are painted in. This is the simplest of the knotted patterns. In others, especially in the flower-garden, *phul vádi*, pattern many colours are used. In printing the flower-garden the parts that are to remain white are knotted, and the cloth is dyed yellow, then some of the yellow are knotted and the cloth dyed scarlet. For the fringe some scarlet parts are tied and the rest dyed purple. When the printing is over the silk goes to the calender, *bandhára* or *kundivála*, where it is washed, starched, and damped with water blown in fine spray from the worker's mouth, beaten by heavy mallets, *kundi*, and folded. The knotters besides middle and low class Musalmán and Hindu women are Chunddigars, Musalmáns of Hindu origin, a hardworking, sober, and thrifty class.

Of the three chief classes of silk goods, plain silks, brocades, and silk prints, the plain silks are either sold by Vániás and Bohorás in

Chapter VI.
Manufactures.

Ahmedabad shops, or sent to Káthiáwár, Rajputána, Central India, Bombay, the Deccan, the Central Provinces, and the Nizám's dominions. Some are also exported from Bombay to Siám. The trade in plain silk goods has of late years suffered from European competition, and the prices and rates of wages are said to have considerably fallen. The brocades and cloths of silver and gold, chiefly used as state dresses and trappings for cattle, horses, and elephants, are by Vánia and Kanbi dealers called *doshi vániás* sold in Káthiáwár and Central India. Considerable quantities are sent to Bombay. The growing fashion at the courts of Gujarát chiefs of doing away with the use of brocade has of late considerably reduced the local demand. But they still find a good market in Central India. The silk prints are used chiefly for women's robes and are by women of the higher classes worn in considerable quantities in Gujarát, Káthiáwár, and Central India.

Blankets.

Wool weaving is not an industry of much importance. In Ahmedabad and still more in many of the country towns, Bharváds and Dheds weave wool into blankets and pack saddles. These articles have no special merit and are made chiefly for local use.

Ivory Bracelets.

Ivory working is carried on only to a small extent. The ivory is brought from Cutch and Bombay, and in Ahmedabad and to a small extent in Dholera, Modása, and other country towns is, by turners, *maniárs*, Kanbis in the city, and Vániás and Musalmáns in the country towns, worked into bracelets in the same way as wooden bracelets. No toys or other articles are made. Ivory bracelets are chiefly used locally by high caste Hindu women and by some Musalmán women of Hindu descent. Little goes beyond district limits. The trade is in a thriving condition. All who can afford it wear ivory bracelets for outdoor use. Even poor Kolis and other low-castes stint themselves to buy these bracelets for their women. Six, three on each arm, are generally required to be worn by each woman, and are worth from £2 10*s.* to £5 (Rs. 25-Rs. 50).

Inlaid Mother of Pearl.

One of the processes which has fallen into decay, and may be said to be all but extinct, is inlaying wood with patterns of mother of pearl. The work is to be seen on the wooden canopies over the shrines at Sháh A'lam and Sarkhej, and on stone in the marble tomb of one of Sultán Ahmad's queens. The simpler designs were formed by filing pieces of mother of pearl to the required size, and letting them into the pattern cut in the block of wood. The more elaborate designs were, with fragments of different coloured mother of pearl, worked into cement and laid on the surface to be ornamented. Of the coarser and commoner kinds of inlaying a little is still used for the frames of *tamburás, rubábs,* and other guitars and violins. No one now practises the finer forms of inlaying, and only one man supports himself by inlaying musical instruments.

Leather.

Leather working gives employment to a large class of people called *Dabgars,* Hindus of the Mochi caste, and Musalmáns. The chief articles are jars for holding clarified butter, made of buffalo skin, the thickest of west Indian hides. To make these jars, hollow clay moulds of the required shape and usually about half an inch thick are made in three separate pieces, the body, the neck, and

Chapter VI. Manufactures.

the rim, and are left to dry in the sun. A skin, fresh from the slaughter house, is for several hours soaked in cold water and lime, the hair and fatty matter is scraped off with a knife, and the skin spread on a stone or marble slab about two feet three inches long by eighteen inches broad. While still wet the skin is laid with the hand round the body of the mould, and pressed to it with a rough flat stone. Three pieces are generally enough to make the first coat of the body of the bucket. Meanwhile the clay neck is fastened to the body of the jar with wet clay and a strip of leather is brought round it; the joinings of the edges of the skins being filled with pulpy scrapings and odds and ends kept on a wooden block close by, the skin is then smoothed over with the *dabar*, a flat leather-covered cloth stick; the rim is then fastened on in the same way as the neck and a piece of skin is rolled round a circle of clay and fastened to the neck with small leather shreds. If a specially strong jar is required a second and sometimes a third coat of skin are added; paper ornaments, written addresses, and names, are often thrust under the outmost skin. When the jar is ready it is put in the sun to dry. It is then beaten all over with clubs so that the clay case is broken into fragments and can be poured out through the mouth. As a rule the smaller the bucket the thinner is the skin. The work of making the clay moulds is generally left to the Dabgar women. The butter and oil jars besides being used all over Gujarát are sent to the Persian Gulf, the Red Sea, and Africa. Another article made by Dabgars is scales, *tájva*. These are made by stretching wet pieces of hide on clay pots, *matkás*. During the rainy season when the work of making leather jars is at a standstill, the Dabgars paint in oil colours and varnish common cotton umbrellas. Of late years (1874-1878) the great export of hides to Europe is said to have raised the price of leather and lessened the manufacture of jars and scales.

Shoemaking.

There is a large manufacture of shoes, Ahmedabad women's shoes being thought the best in Gujarát. In Ahmedabad a shoemaker, *mochi*, makes saddles and bridles after the English fashion. Hunting whips and shields are also made to a small extent, the latter only to order. Buffalo and cow skin hides are also used extensively in spinning mills for straps and pickers. Some of the shoemakers are Musalmáns, the rest are Hindus of two chief divisions, Gujaráti and Márvádi Mochis.

Condition.

The changes of the last twenty years have, on the whole, been against craftsmen whose skill lies in special hereditary processes; and in favour of those whose callings are more varied and general. Dyers, weavers, and paper makers are often worse off, while carpenters and blacksmiths are better off than before. Yet, except such special cases as the Dholka weavers and the Viramgám dyers, half of whom European competition has forced into domestic service and other callings, the artisans scattered through the district have gained by the wealth of late years spread among the lower orders. Thus in Dhandhuka, which may be taken as a fair type, it is thought that while three-fourths of the cultivators are in debt, four-fifths of the artisans are free from debt. To craftsmen, almost as much as

to labourers, their power of moving about has been a gain. Nearly every one of the flourishing Dholera craftsmen is either himself or is the son of a newcomer. Thirty years ago there was only one family of dyers in Vághpur. Now there is a large community. Numbers of tailors go from Viramgám by rail to Ahmedabad and even to Bombay for the working season, returning to their homes for the rains when they prepare ready-made clothing for sale. These movements are the result not only of safe and easy roads but of the the spirit of personal independence so strongly fostered by the present administration. On the other hand besides the wider and fiercer competition under which in several cases their special skill has lost its value, their love of show and want of energy help to depress the artisan classes. It has been noticed (p. 111) how the guilds, *mahájans*, with iron force keep back any attempt to introduce improvements for saving labour or making it more efficient. The same agency is unscrupulously used by majorities to keep the industrious and active few from rising above the common level. Bye-laws, breaches of which are punished by heavy fines, lay down the hours within which the building of a house shall proceed and the number of tiles or bricks which shall be turned out of each kiln. It is the result of the systematized tyranny of these corporations, and the want of energy and enterprize among their members, that though many artizans have marked mechanical skill none of them has risen to influence and wealth.[1]

---

[1] Materials for this and several other parts of the manufactures section have been supplied by Mr. F. S, P, Lely, C.S.

CHAPTER VII.

HISTORY.

Chapter VII.
History.

THOUGH they contain settlements[1] of very high antiquity, the lands of the district are said to have been first brought under tillage by the Anhilváda kings (746-1297).[2] In spite of their wealth and power, order and tillage would seem to have spread slowly. Till the close of the eleventh century, even in the centre of the district, large tracts remained in the hands of half independent Bhil chiefs.[3] And it seems probable that, neither under the early Hindu princes, nor under the Muhammadan Viceroys (1290-1400), were the Rajput chiefs in the west, or the Kolis in the north and east, reduced to a position of more than half submission and military allegiance. Chosen, early in the fifteenth century, as the head-quarters of the Musalmán princes of Gujarát, much of the district round Ahmedabad became directly managed crown land. Still the outlying chiefs would seem, on payment of tribute, to have been, to a large extent, left free to manage their estates as they chose. The Emperor Akbar (1572), satisfied with the tender of allegiance, was careful to leave their position unchanged. Except Gogha, all of its present lands were included in the district, *sarkár*, of Ahmedabad. At the same time Parántij and Modása in the east, and Viramgám and Dhandhuka in the west, unaffected by Todar Mal's survey, were left to some extent in the position of tributaries.[4] In the middle of the eighteenth century, after their capture of Ahmedabad (1753), the Peshwa and Gáikwár found it convenient to continue the distinction between the central and the outlying parts. Into the centre of the district a staff of Government officers, and a regular system of management were introduced, while the outlying chiefs were only called on to pay a yearly sum of the nature of tribute, and so long as they remained friendly were left in the free management of their territories.[5] Until their transfer to the British in 1803, the position of the border chieftains, except that their tribute was gradually raised, remained unchanged.[6]

---

1 Dholka. 2 Rás Mála, New Ed., 200.

3 Rája Karan (1072-1094) defeated the Bhil chief of Asával and founded a city called Karanávati, probably near the modern Ahmedabad. Rás Mála, 79. See below p. 250.

4 Todar Mal's survey begun in 1579 (984 H.), and about twenty years later revised by Nawáb Shahá-bu-din Khán, remained in force till the death of Aurangzeb (1707). Bom. Gov. Rev. Rec. II. 1821, 678.

5 The Maráthás considered Gogha among the settled districts. Viramgám was at first, as under the Musalmáns, considered part of Ahmedabad. Afterwards (1799) Govindráv Gáikwár transferred all Viramgám, except the head-quarters and Ránpur, to the unsettled or tributary country. Bom. Gov. Sel. CVI. 7. As late as 1814 Chunvál was considered part of Káthiáwár. Bom. Gov. Sel. CVI. 8.

6 Bom. Gov. Sel. XXXIV. 57.

Chapter VIII.
Land Administration.
1803.
Villages.
i, *unsettled.*

proprietors, their shares were either held by a family in common, when the consent of all was required for its sale, or separately, when each holder was free to dispose of the land as he chose. Their want of industry was the great difficulty in dealing with men of this class. Among them no profession was honourable but the profession of arms; no life was worth living but a life of indolence. Ignorant of the comforts of a settled life and liable at any time to lose all they possessed, they took no pains to gain wealth, or to better their state. During the latter part of the eighteenth century, when Moghal rule was loosened and Marátha ascendancy not yet established, the failure of the central authority to shelter them from the raids of freebooters and the exactions of their stronger neighbours, drove the owners of many villages to seek the protection of local chiefs. Sometimes the cession was in perpetuity, *aghát*; sometimes for a certain number of years, *avad*. In some cases it partook of the nature of a free grant, in others of a mortgage for mutual convenience. In almost all cases only a share of the produce and a subsistence, *jiváí*, was reserved for the original owner.

Such of the landholders as were able during those disturbed times to add to their estates aimed at becoming independent chiefs. Living in fortified villages, some of them strengthened by large stone-built castles, they kept bands of armed followers, both foot and horse, to guard their persons and villages, and to wage war on their neighbours. They managed their affairs and settled their disputes at their own will, and so long as they were not hostile and paid their tribute, the paramount power never meddled either with their foreign or their home affairs.[1]

ii, *quiet.*

The population of the quiet villages belonged to three classes, the labourers and artisans, the cultivators, and the village headmen and managers. The village headmen had no formal emoluments; they made their position pay by sparing their own land when distributing the Government burden. The mass of the cultivators, though, according to the custom of the country they could not be ousted from their holdings, did not own their fields, but held them from the headman as the manager of the Government interest in the village.

Kasbátis.

In different parts of the district, but especially in Dholka, besides the large Girásia landholders, a body of men called Kasbátis or townsmen, the descendants of rich soldiers, had by lending money and acting as revenue securities raised themselves to be upper landlords or middlemen.[2] Useful as a set-off to the Girásiás, the Kasbátis had been treated with much indulgence by the Gáikwár, and some of them claimed the right of settling for the rental of the villages under their management. About the year 1750 they had gained power over villages by bringing them into cultivation, stipulating

---

1 Bom. Gov. Sel. XXXIX. 51. The following details show the strength of some of these chiefs. In Dholka the Koth chief had 2000 militia and 150 horse; the Gángad chief, a constant force of 1000 men; the Bhávnagar chief, 7000 infantry and 500 cavalry.

2 So great was their reputation that their protection was paid for by merchants, and they imprisoned or imposed billets on their debtors without any reference to the Government. Mr. Dunlop to Government, 8th Sept. 1817.

Chapter VIII. — Land Administration. 1803.

that they should be allowed to lease them at a fixed rent. When the lease fell in, it was renewed and instead of forcing the farmers to close all transactions connected with the former lease, the Gáikwár's Government allowed them to take bonds from the heads of villages for balances of revenue. In payment of these bonds the Kasbátis obtained lands and sometimes whole villages in grant or in mortgage.

Rent How Fixed.

In unsettled villages the cultivators, besides birth and marriage fees, paid the superior landholder one-half of their crops, or an average rate much the same as that in force in quiet villages. Small shareholders paid a quitrent varying in amount from 1*s.* to 2*s.* 8*d.*, and in some cases rising as high as 8*s.* an acre. Village proprietors paid for their village a lump sum that was liable to be increased and was subject to the levy of additional cesses.[1] The payment of the larger chiefs, though in name a rental, *jama*, had much of the character of a tribute and was enforced only by the presence of troops. The amount was fixed by the chief's power to resist rather than by his ability to pay; when the available force was strong, the demand was raised.

Rent How Realized.

Except that very many of the villages were in the hands of men of capital, who chiefly as sureties had come to hold a middle place between the village managers and Government, the system of realizing the revenue of quiet villages was the same as in Kaira. For each village the amount was fixed by the district officers and the headmen, sureties were taken from the headmen, and they were left to arrange with the cultivators how much each was to pay. Except specially settled garden lands, the rents were fixed either on the basis of one-half share of the produce taken in money or kind; or the rent was a money acreage charge, determined partly by the nature of the ground and the sort of crop grown, but mainly on the distance of the field from the village site.[2] The revenue was paid in two instalments; in October, and in March or April. But a considerable portion often lay over till July or August. Provision was generally made for lowering the demand, in the event of war or loss by a bad season. As a rule the system of dealing with men of capital and of forcing them to give sureties, secured the punctual payment of the Government share. Village headmen unable to recover their rents from the cultivators, often sold or mortgaged portions of Government land. Failing an arrangement of this kind, the crops were attached, and when ripe one-half of the produce was kept for Government. Cultivators were seldom ousted

---

1 The Maráthás had added to their demands. Bom. Gov. Sel. XXXIX. 44-57; they also levied a Holi powder, *guldl*, cess, a *dasara* cess, and a *chhapar* or house cess. Bom. Gov. Sel. XXXIX. 19.

2 The *bigha* rate was generally less than the share rate, Rs. 4 to Rs. 6 instead of Rs. 5 to Rs. 8. The examples of *bigha* rates given by Colonel Walker are, millet Rs 3 - Rs. 4; pulse, Rs. 4; rice, Rs. 5 - Rs. 10; sugarcane, Rs. 10 - Rs. 20; tobacco, Rs. 8 - Rs. 15; plantains, Rs. 15 - Rs. 20; vegetables, Rs. 6 - Rs. 8; ginger, Rs. 18; wheat, if grown by well water, Rs. 10; if by rain, Rs. 5. Bom. Gov. Sel. XXXIX. 41. Mr. Dunlop says: In practice Akbar's survey and rules were entirely neglected. Government extorted what revenue they could from headmen, managers, or farmers, without caring how it was raised.

from the land; but, except their tools, their property was liable to be sold.

Chapter VIII. Land Administration. 1803.

For the future revenue management of the district, Colonel Walker was of opinion, that in villages belonging to the more powerful chiefs, the system of collecting their tribute should not be changed. Government had probably no right to interfere in the management of these principalities. The chiefs were bound to pay their tribute, and to keep from breaking the peace, and as they seldom did as they ought, a just cause would never long be wanting for bringing them to more perfect obedience. But in Colonel Walker's opinion a war with the Rajputs and Kolis would cause much loss of life and would bring neither glory nor gain: 'At present,' he wrote, 'we have the chiefs' trust and respect in a very high degree. An attempt forcibly to change their customs would rob us of their friendship, and if the attempt failed, we should besides their hatred have their contempt. An acknowledgment of their submission as subjects should be taken. But no attempt should be made to raise the revenue demand. In unsettled villages without any acknowledged chief, the revenue should be collected from the cultivators or the village headmen, and not from one of the superior holders or from a surety. In quiet villages, instead of the destructive system of farming, and the agency of middlemen with its disgraceful collusion and chicane, the Company's servants should collect the revenue and so secure the obedience and gratitude of the cultivators. Finally from illegally alienated Government lands a large increase of revenue should be drawn.'

1804-1814.

During the first ten years, Colonel Walker's advice to change the system of management as little as possible, was carefully followed. For two years (1804-1805) the district remained under the charge of the Resident at Baroda. During that time except that the chief sub-divisional officer, *kamávisdár*, ceased to be the farmer of the revenue, the management remained unchanged, and police and justice were administered according to local usages and the principles of equity.[1] In 1805 the district was brought under the charge of the Collector of Kaira and in the same year the British regulations and system of justice were introduced. These Acts contained no provisions to meet the special case of the almost independent chiefs. But as their followers did not attempt, by an appeal to the British courts, to interfere with the chiefs' authority, the change in the chiefs' position did not at first cause difficulty or hardship. At the same time the introduction of British regulations was important, as it settled what at first was doubtful, that in proprietary villages sovereign authority vested in the Company.[2]

---

1 Reg. II. of 1805.

2 Colonel Walker found the Dholka chiefs in a great degree independent, nearly on the footing of the Káthiáwár tributaries. Bom. Gov. Sel. XXXIX. 14. He was not satisfied that the Peshwa had jurisdiction over the districts and suggested that the Giṛásiás should, like the Dholera proprietors, be induced to give up their jurisdiction. The question of jurisdiction was discussed at length and the action of the Bombay Government was in the end approved by the Court of Directors. Bom. Gov. Letter, 28th May 1817; East India Papers, III. 717. The Thákor of Bhávnagar

Chapter VIII. — Land Administration. 1804-1814.

The next points for decision were whether the Girásiás were the owners of villages and estates, and if so whether Government had a right to increase their payments. In 1810 and 1811 Mr. Rowles the Collector of Kaira inquired at length into these questions. His researches satisfied him that the Girásiás were proprietors.[1] At the same time he was of opinion that the Government demand was not of the nature of a tribute but was based on a right to share in the village revenue. In support of this he showed that the amount paid by the Thákor of Limbdi had varied from year to year, and that 'through the venality, remissness, and imbecility of persons charged with the maintenance of the rights of the sovereign,' the Dhanduka landowners had since 1725 been able to reduce their payment to about one-half.[2] He showed that the Bhávnagar chief, though his right to the lands was no better than that of the smaller proprietors, was (1814) paying only fifteen instead of twenty-five per cent.[3] Mr. Rowles' views were adopted by the Bombay Government and the Bhávnagar chief's contribution (1815) raised by £1800 (Rs. 18,000).[4] Another important change, introduced about the same time (1812), was the payment of Girásiás' money claims from the Government treasuries. These claims were of less importance than in Kaira. A number of the payments, blackmail to the Káthiáwár chiefs, ceased to be demanded when Káthiáwár came under the Company's superintendence. And as the burden was gradually lightened, care was taken to avoid any step that might give rise to the idea that the claims were just and would be enforced.[5]

State of the District. 1814.

Though the country was not one in which any rapid improvement could be expected, the first ten years of British rule were not without good results. Boundary disputes, formerly settled by fights between several hundred armed men, had almost ceased; the feuds of the different chiefs had been suppressed; the Káthi raids, to a great extent, stopped; and the peaceful demeanour of Girásiás and Kolis showed their contentment under the Company's rule.[6] At the same time order was by no means well established. Among the Rajputs cases of self-outlawry were common, and so strong was the feeling of insecurity that, long before nightfall, husbandmen were in the habit of leaving their fields and seeking shelter within their walled or hedge-girt villages. There was still the risk of a Káthi raid. Each village had its outlook on some tall tree or other

---

at first specially exempted from British jurisdiction, forfeited the privilege by misconduct in 1813. Bom. Gov. Sel. CVI. 11. Another point of importance settled at an early date was that the right to levy transit dues belonged to the Supreme Power and could be exercised by no proprietor within the Company's territories. Gov. Res. 23rd Aug. 1815; Bom. Gov. Rev. Rec. 102 of 1815, 2302.

[1] East India Papers, III. 719.

[2] In 1811 they paid £2700 (Rs. 27,000) less for 100 villages than in 1725 they had paid for fifty-nine. East India Papers, III. 720.

[3] Mr. Rowles, 23rd March 1814. Bom. Gov. Rev. Rec. 102 of 1815, 2266.

[4] Bom Gov. Despatch 17th April 1816. This decision was afterwards (14th July 1819) approved by the Court of Directors, who held that the right of Government to increase the Girásiás' tribute followed from the decision on the question of sovereignty. Girásiás were on the same footing as other subjects, and their property was liable to a proportionate share of the public burdens. East India Papers, III. 729.

[5] East India Papers, III. 727. [6] Collector of Kaira, Aug. 20, 1808.

Chapter VIII.
Land Administration.

Cessions of 1817.

When the revenue collecting force came, the Kolis leaving their villages retired to inaccessible hills, and came back when the army was gone. Sometimes joining together they resisted the whole Gáikwár army, occasionally with success. Under the name of *ghásdána* they extorted many cesses from the quiet villages, carrying off their cattle if they refused to pay. Their villages were populous, but with very little tillage, as the greater number of the people lived entirely by plunder. The headmen of the quiet villages were indebted to town Vániás, in many cases so deeply that they had little chance of freeing themselves.[1]

Daskroi, 1819.

The central Daskroi lands, though to a less extent than the outlying parts of the district, had suffered from misrule. The city of Ahmedabad and its neighbourhood were in a most disturbed state. Every night there were attempts at robbery and the country round was infested with bands of plunderers, both mounted and on foot. The population was scanty, and more than a half of the Government arable land was waste.[2] Though no sudden improvement could be looked for, much relief was given by putting a stop to the old system of hired revenue securities, *manotidárs,* and instead of hired securities, letting one respectable man or village be surety for another. By this change the people were almost entirely freed from the burden of providing security.

Changes, 1817-1820.

Viramgám.

In Virámgam and Parántij order was soon established. In 1819 a rising of the Viramgám Chuvália Kolis was at once put down. The chiefs were made to enter into engagements backed by binding securities, to give up their rude independence, to behave as peaceful subjects, and to help the police whenever their aid might be called for. At the same time their transit duties were abolished, Government accountants were introduced into their villages, and their income reduced to twenty per cent of the village revenue. With the establishment of order immigration began. The new comers, partly strangers, partly former inhabitants, seemed active and intelligent. Some progress was soon made. But with so scanty a population no great development could for years be expected.

Parántij, 1819.

No difficulty was found in settling the Parántij Kolis. They agreed to receive payment of their money claims from the Government treasuries [illegible]stead of direct from the quieter inhabitants, and to pay Governme[illegible] a sum £202 (Rs. 2020) in excess of their former contribution. In [illegible]he quiet villages [illegible] [illegible]tlement [illegible] made with th[illegible] [illegible] headme[illegible]

Chapter VIII.

Land Administration.

Cessions of 1817.

Viramgám.

Daskroi, Viramgám, and Parántij when ceded by the Gáikwár in 1817 were, except the central lands of Daskroi, in a most depressed and disordered state. In Viramgám, so little was the Gáikwár's agent feared, that in 1816 shortly before its transfer, the chief of Pánur carried off from Dholka 230 head of cattle, and refused to give them up, except under an order from the Peshwa. In the north-east the chief cause of disturbance was the organized class of plunderers known as Chuvália Kolis. Neither cultivating themselves nor letting others cultivate, the common people lived by plunder, and great part of the chief's revenue was derived from a share in the booty. Surrounded by thick, strong, almost unpassable hedges, they lived in populous mud-built villages divided into wards, *vás*, each ward with a sheltering hedge and a chief of its own. Their whole territory contained about fifty of these villages grouped into four estates, Bánkhora, Dekváda, Chunvál, and Kukávi, each with a head and about six under-chiefs. The headmen were the Government agents for collecting the revenue, and had considerable influence in the country, levying transit dues on all goods passing through their territory. In the Peshwa's time they were nominally under the Viramgám manager, and in the Gáikwár's time, under Kadi. But the amount of their contribution was generally fixed and realized by the commander of the troops. If in the slightest degree offended, till remissions of rent and other concessions were granted them, they roved over the country as outlaws. Impoverished on the north-east by the Chuvália Kolis, Viramgám had on the west for years been exposed to the attacks of Khosiás and other freebooters. Though well supplied with ponds and reservoirs, the people were fewer, and the tillage scantier than in the west. Except close to villages, for nearly thirty miles between Viramgám and Jhinjhuváda, there was not an acre of cultivation. Viramgám protected by its walls was the only prosperous place in the whole sub-division.[1]

Parántij, 1819.

Of the eastern cessions, Parántij and Harsol were in 1819 described as flat and open, the soil light and sandy, the chief produce millet and pulse. Modása and Báyad were rather more hilly and almost entirely covered with brushwood. The soil was in many places extremely good. Coarse rice was grown in the rains, and in the fair season, watered wheat and barley. This t[illegible]ritory, once rich and well peopled, had by neglect and misrule bee[illegible] brought to great [illegible] Parántij and Modása had [illegible]st much of their [illegible] few, with some [illegible]ell built h[illegible] only a c[illegible]

Changes, 1817-1820.

a number of cases. The results were most satisfactory. People, some of them old residents, others from neighbouring states, flocked in; traders came back from the Deccan and the Konkan; wells were dug or repaired, and other improvements were made. In spite of occasional gang robberies, order was established, and as early as 1820, the general quiet and safety was the common talk of the villagers.[1]

In spite of this improvement so backward was the district that Government felt that some time must pass before it could show many signs of prosperity. Their leading instructions to the district officers were to be active in collecting information; to do what they could to prevent the causes of evil; and to wait for a time of fuller knowledge before undertaking great changes.

District Staff.

Under the revenue system in force during the early years of British rule, the district executive staff consisted of the Collector, an European assistant, and six *kamávisdárs*,[2] the Collector's agents through whom settlements were made, the revenue realized, and most of the district statistics collected. Under its *kamávisdár* each sub-division, except Dholka, had its revenue superintendent, *desái*, its accountant, *majmudár*, and most of them *amin-patels* or assistant *desáis*. The *amin-patel*, not hereditary but chosen from the *patels*, was entrusted with almost all produce examinations, the *desái* was a valuable check on the *kamávisdár*, and the sub-divisional accountant was very useful as the head of the village accountants.

Village Staff.

Few villages had the full staff of officers and servants, but as a rule there were several headmen, an accountant, *taláti*, and village watchers, *vartaniás*, *dharásaniás*, *rávaniás*, and *haváldárs*.[3] There were also carpenters, blacksmiths, barbers and torch bearers, potters and water carriers, Dheds who took away, skinned, and ate carcasses, [illegible] Olganás, or Bhangiás, sweepers and guides. Some villages had [illegible] village servants were sometimes paid [illegible] them the headmen gained least [illegible] had no grants of land and [illegible] of freeing themselves [illegible] village expenses [illegible] sometimes an [illegible] office,

Chapter VIII.
Land Administration.

System, 1821.

Village Constitution.

Villages were of two classes, Government, *khálsa*, and proprietary, *girásia*. Of the proprietary villages some account has already been given. In Government, *khálsa*, villages the sharehold system had either never been common or had broken down under Marátha exactions. A few sharehold, *pátidári*, villages, chiefly in Daskroi remained and efforts were made, in some cases with success, to revive the system. In sharehold villages, the shares were, as in Kaira, fixed either by Government or by the sharers. The sharers were mutually responsible for the revenue, and though, as a rule, when one of them failed to pay the rest made good his share, the system occasionally broke down. A defaulting sharer might regain his land, but he had first to make good any deficiencies. In each share the cultivators and even the village artisans were the sharer's men, *ásámis*. They were supplied with houses and helped in other ways and so long as they paid their rent seem to have had the right to remain on the land. Shares were saleable. But they were seldom sold till they had fallen into a state of mismanagement. In police matters the police *patel* generally worked through the sharers. Villages of this class were sometimes leased to speculators. And though this generally resulted in destroying their special constitution, in some cases the sharers arranged with the farmer to keep alive the distinction of shares. Except the very few held under the sharehold system, all Government villages were simple, *seja*.

Rent How Fixed.

i, *proprietary villages.*

The Government demand from the large landholders was so far a tribute that its amount did not depend on any special inquiry into their revenues. The payment was in each case fixed from year to year on a rough estimate of the value of the estate. The tenants' rents were fixed by the custom of the country. They were generally a certain share of the crop taken in kind.

ii, *sharehold villages.*

In sharehold villages, except on the rare occasions when they were handed over to a revenue contract[illegible] with the body of sharers. Va[illegible] year the amount was in an[illegible] To find the tillage area [illegible] inspected the vil[illegible] and the sort[illegible] the tot[illegible]

Collector arranged with the headman, or with a revenue contractor, to become responsible for its payment either for one year or for a term of years. If a lease was granted, the revenue contractor engaged to collect the rents according to former custom, not to alienate Government land, and to add to the tillage area, so as, at the end of his lease, to hand over the village in a better state than he found it. Any further sum he was able to raise, the contractor was allowed to keep. When for any reason the ordinary arrangement with the headman or contractor fell through, the revenue was, under the Collector's supervision, gathered piecemeal from the husbandmen by the village accountant.

The rental was in all cases based on the right of the Government to a certain share in the crop. This share varied with different crops and with different harvests from one-half to one-sixth, or even one-eighth. The amount was either a share of the crop or a money payment estimated on the value of the Government share. It was generally fixed by a village committee, *panchâyat.* Mr. Dunlop was inclined to think the nominal rate very often higher than the land could afford to pay, and that under such circumstances cultivation was possible only because Government failed to realize their supposed share, or because along with the highly taxed land, rent-free or quit-rent land was held.[1] The husbandmen paid only on the land under tillage. Fallows, except when they formed part of a distinct holding, *khâta,* or of a village share, were never taxed. If he dug a well or banked a rice field, the cultivator was for a term of years allowed to hold the land without a rise in rent. If a landholder thinking his land overtaxed, complained to the Collector, an inquiry was made into the quality of the soil. If the manager, *kamâvisdár,* thought a reduction necessary, he reported the case to the Collector, by whom orders were passed. The scarcity of population was the chief safeguard against over-assessment. When a cultivator thought himself more heavily taxed than his neighbours, he could always move to another village. Besides the land assessment, there were many cesses, *verás,*[2] the chief of them a plough cess averaging about £2 (Rs. 20) a plough, though Bráhmans, Bháts, and others paid less. The large landowners, and the village headmen and contractors who were responsible for the rental of entire villages, would seem to have paid in money and in instalments.[3] Either without or after an esti[illegible] made [illegible]

---

1 The private or alienated land generally paid some qui[illegible] lands when the specially taxed parts were lowered to the normal [illegible] *svádiu,* of one-third of the ordinary rental was fixed on the alien[illegible] Papers, III. 692.

2 The cash cesses, *verás,* were of two kinds, those levied on c[illegible] levied on artisans and traders. Cultivators paid besides a plough[illegible] some of the Parántij villages the whole demand was recovered, a[illegible] bag cess and a house cess, the rates being in many cases spe[illegible] and rent-free lands. Among non-cultivators, herdsmen had t[illegible] traders a charge on dealings and sales, and those not otherwise [illegible] a caste cess.

3 Bom. Gov. Rev. Rec. 45, Vol. II. of 1821, 705. It do[illegible] the rule about instalments extended to the payments of [illegible]

Chapter VIII.
Land Administration.
System, 1821.

landholder himself, one of the native district revenue officers examined the general state of the village, and made a rough estimate of the produce. Comparing the estimate with the past year's payments, the Collector fixed the rental for the next season. If a proprietor did not pay his rent, and if he failed to make out a case for remission, his village was attached and managed by the Collector. Men of this class generally took from the cultivators a share of their crop. In other cases they required security from tenants through their agent or Vánia, and kept running accounts with the cultivators. If their tenants disputed their demand or failed to pay, the Collector took the same steps on behalf of the proprietor or contractor as he would have taken on behalf of Government in a directly managed village.

Rent How Realized.

In directly managed villages the rent was collected by instalments, at dates fixed according to the time the crops were likely to come to market. Grain payments were collected in the village threshing floor, and the share was either estimated by the Government agent, or was actually weighed in his presence.[1] In lands held under the cash acre-rate, *bighoti*, system, the village accountants kept a register of each cultivator's fields. While the crops were standing, a revenue officer, with two or more headmen, went to the cultivator's field, and saw that the area under tillage agreed with the area shewn in the accountant's books. After the accountant's calculations were made and checked by the subordinate revenue officer, the Collector, or one of his assistants, in presence of the headman of the village, examined the estimates, compared them, and gave every opportunity for checking their correctness. In most cases the headman of the village agreed to be responsible for, and to collect the village revenue. If he was unwilling or was a man of bad character, the collections were made by the Government officers straight from the cultivator. In all cases to protect the cultivator, the accountant was bound to keep a record of the amount due by each villager, and, for all payments, receipts were passed by the head of the village. Formerly the practice prevailed of requiring security before leave was given to cut the crop. The security was generally a man of capital, who in return for the accommodation charged the village a heavy rate of interest. In 1820 to free the cultivators from this burden, Mr. Dunlop arranged to take the surety of one respectable cultivator or of one village for another. When a cultivator failed his [illegible] the first step taken was to billet messengers or [illegible] If this failed, the debtor was sometimes thrown

---

[1] Rec. 45, Vol. II. of 1821, 705. In Viramgám quiet villages, the [illegible]aken in kind, the shares varying from one-half in the more settled [illegible]l in the poorer: Bom. Gov. Rev. Rec. 45, Vol. II. of 1821, 42. When [illegible]o be cut, or after it had been cut, the headman and accountant, [illegible] respectable headmen from other villages, went to each field, and [illegible] of its crop. If the cultivator agreed to the estimate he might [illegible]s crop. If he thought the estimate too high, the grain was taken [illegible]ing floor, threshed, and the Government share fixed by weighing. [illegible]t, on paying its value, keep the Government share of the grain. [illegible]the village, the Government grain was taken to the chief [illegible]nder the management of the *kamávisdár*.

into prison. But such a course was rarely necessary, years ending 1821, the number of persons placed under averaged less than nine. Distraint of property was unk

The establishment of Government village accountan interference with the management of proprietary vil somewhat too rapidly pressed on. When Mr. Elphins Governor of Bombay, visited the district in 1821 (April), he t results in some respects unsatisfactory.[2] In his opinion t chiefs and landlords should, as far as possible, be left in th of tributaries. Their payments might be raised once in six years, but this should be done only when the proprietors co it. No accountants should be appointed and no inquiry s made into the produce of their estates. The contributions of the smaller landlords should be reduced ten per cent. The la should, as far as possible, dispense with the personal attend the chiefs. In inquiring into old money claims, the circun under which the debts had been contracted should be tak consideration, and, instead of seizing a chief's person, par land should be taken, and either handed over to the cr or managed by the Collector. In police matters the ch Bhávnagar should be made a special commissioner for the sub-division, and without the, to them, somewhat degrading t *mukhi patel*, the services of the proprietors should, as fa possible, be secured. Dholka and other *kasbátis* should be tre in the same way as the Rajput proprietors. The accountants sh be taken away from their villages, and their estimated shar the village revenues be raised ten per cent. They should made responsible for the tribute, and for the maintenance of pub order. In judicial matters the proprietor might, if necessary, called on to furnish security and be forced to give up stole property and offenders. But he should be under none of the regulations applicable to police patels, and it should rest with the magistrate what offences to notice. No serious crimes should be passed over, and in all such cases the chief should be called on to give up the criminal. If the demand was not complied with, it should be enforced by a billet and daily fine. Obstinat neglect might be punished by apprehending the chief, and resistan attacking him as a public enemy. Serious complaints against f should be examined by the Collector; if apprehended, the cl d be made over to the criminal judge. Chiefs habitually g at plunder, might be deposed and imprisoned, an over to another member of the family. Civil most cases take its course. But, in some villages first be made to the magistrate, who should decid the defendants to the courts or settle the dispu As regards the management of Government villa did not object to Mr. Dunlop's practice of, alienated lands, imposing a one-third share o

---

[1] Bom. Gov. Rev. Rec. 45, Vol. II. of 1821, 669-719.
[2] East India Papers, III. 677-697.

had little doubt that Government had the right to illegally sold and mortgaged by village headmen. At me, as part of the revenue paid by Government lands drawn from alienations, to resume grants would derange s, and would cause much disgust and disorder. Village s, though somewhat suddenly introduced, had worked letting of villages to the highest bidder, unavoidable r resources were not known, was hurtful to the villages d be discontinued. Mr. Dunlop was anxious to a system of six to ten-year leases. Of this proposal Mr. ne did not approve. No lease could safely be granted village facts were known, and all pressing unevenness of fraudulent withholding of Government dues were corrected. en a lease could not be safely granted to a speculator headman. It did not suit a cultivator without capital. The e in which a lease was likely to work well was a sharehold with a large body of sharers.

pite of the changes he found it necessary to propose, Mr. stone was of opinion that the district had been well managed. Kaira, the upper class of landholders, the men of capital, and istrict officers, had suffered; the revenue had in some cases strained to the highest pitch; and the strict process of the courts had caused much loss and hardship to debtors. Still r had been established; crime in great measure put down; and revenue collected without distraint, and with scarcely any prisonment. The influx of settlers from other districts seemed to w that the peasants were not too heavily burdened.[1]

As in Kaira, one of the most important measures, in the early years f British rule, was the survey of the district. This included the preparation of maps; a minute inquiry into the resources and condition of each village; and the settlement of boundary disputes. From the village statistics for each sub-division, a memoir was prepared, giving full details of the people and of their mode of tillage. Beginning in 1820, Daskroi was surveyed between April 1820 and December 1822; Dholka between January 1823 and May 1824; Parántij, Modá and Báyad between December 1824 and March 1826; and V ám, which remained unfinished, was apparently begun in he survey was limited to the quiet or Government s are available for the districts of Dhandhuka and oprietary villages of Parántij and Viramgám.

large mass of details that illustrates the character e, the following shortly summarizes the account ch sub-division at the time of survey. Perhaps

---

rs, III. 686. Mr. Elphinstone mentions 1300 families coming from rs came that the Gáikwár's agent complained that their districts Gov. Rev. Rec. 17 of 1821, 16, 17. In 1821, 73 new villages, Viramgám, and 41 in Parántij were established. Bom. Gov. Rev.

, and XI.

the most convenient order is to begin with the central Daskroi sub-division, then to describe the eastern Parántij and Modása territories, and to end with Dholka and Viramgám.

Survey, 1820-1826.

Daskroi.

The lands included in the 146 Daskroi villages, surveyed between 1820 and 1822, were, with the exception of a barren salt tract[1] in the south-west, rich and well tilled. The spaces round the city were given up to vegetables. In the south were very fine rice villages, and to the east large fruit-tree groves and stretches of high tillage. Order was well established. The Kolis, belonging to the Talabda tribe, were quiet and easily managed, willing to till to the best of their knowledge and means. There were no chiefs or large landlords. The alienated area, including eleven villages, was 33·84 per cent of the whole arable land. Of the 135 Government villages, 117 were occupied, and though the sites of the other eighteen were unoccupied, their lands were tilled. Except two held sharehold, all were managed simply.[2] Of the whole area of arable land 58·24 per cent was under tillage, and on an average to each square mile were sixty-three houses, 207 souls, 156 horned cattle, twenty-two ploughs, and seven carts. The average net revenue per acre was about 6*s.* to 9*s.* (Rs. 3 - Rs. 4-8). The villages were large and the houses tiled, three-fourths of them brick-built. But the people had lately passed through a severe strain, and were 'miserably dependent' on money lenders. The land revenue, which had risen from £26,352 (Rs. 2,63,520) in 1815 to £31,738 (Rs. 3,17,380) in 1822, fell in 1823 to £28,618 (Rs. 2,86,180).[3] The original system of assessment is said to have been crop-division, one-third to Government and two-thirds to the cultivator. Then Todar Mal (1590), without entirely doing away crop-division, brought in a money acre-rate, *bighoti*, fixed partly on the kind of soil, partly on the crop. The Maráthás (1755-1817) showed little respect either to the crop-share or the acre-rate system. Holding the village headmen responsible for the whole rental, they left them to distribute the amount as they chose. Partly from the unsettled state of the country, partly from the heaviness of the Marátha demand, all definite system in collecting the revenue ceased. The crop-share remained in some villages; acre-rates were in force in others; in a third group crop-shares and acre-rates were mixed, and in a fourth the revenue was chief[illegible] collected in cesses. When the district came under Engl[illegible] (1817), as nothing was known of their resource[illegible] on two or three year leases offered to the high[illegible]

1 Arable lands sometimes suddenly became salt, *khár*, and a[illegible] for one or two years again recovered their sweetness. In Mr. W[illegible] (1826) stagnant rain water was the cause of saltness. Gov. Litho. [illegible]

2 In 1824 an effort was made to revive the sharehold syste[illegible] nineteen villages in which it had broken down. But the headm[illegible] they had no capital. Bom. Gov. Rev. Rec. 117 of 1825, 34.

3 Bom. Gov. Sel. X. 115. The details are 1815, £26,352; 1816, £23,715; 1818, £27,682; 1819, £28,800; 1820, £30,069; 1821, £[illegible] £31,738; 1823, £28,618. Bom. Gov. Sel. X. 115.

Chapter VIII.
Land Administration.

Survey, 1820-1826.

Daskroi.

headmen unwilling to give up their management bid high, and the speculators, satisfied that the villages had hidden resources, bid against them. In their rivalry sums far beyond the fair village rentals were offered. The result was much pressure and complaint. The lease system was given up and in its stead money acre-rates were introduced. But the change was brought in gradually, and at the time of survey the forms of assessment were most varied.[1] As in Kaira, great part of the acre-rates were fixed in 1819-1820, a time of high agricultural profits. But the following years were less prosperous and remissions had to be granted. The character of the change made will be seen from the following example. In the village of Báreja, under the Marátha system, in 1819-20 the cultivators of alienated land paid acre-rates of from 2*s.* to 8*s.* (8 *as.* - Rs. 2 a *bigha*), and the cultivators of Government land paid on the early rice crops a little more than half the produce, and on the watered cold weather crops a third. Besides this the cultivator had some money payments to make, on the ground of cart hire to market, and an extra levy, *mángna*. The dry grains paid a money rate varying according to the soil from 8*s.* to 12*s.* an acre (Rs. 2 - Rs. 3 a *bigha*). Then there were cesses on most classes of traders, artisans, and cattle-keepers not cultivators. The new assessment of 1820-21 on the same village, was, in alienated lands, from the owners, the former rates, and from cultivators not owners, one-third of the regular assessment; from Government lands, on the rain or early rice crop, for the best land £2 4*s.* (Rs. 22) an acre (Rs. 11 a *bigha*), for the middling £2 (Rs. 20), and for the poor £1 12*s.* (Rs. 16); for coarse rice 16*s.* (Rs. 8); for cold weather wheat from 12*s.* to 16*s.* (Rs. 6 - Rs. 8). Of cesses, *verás*, £42 14*s.* (Rs. 427) were paid by Vániás, £1 8*s.* (Rs. 14) by Jogis, 16*s.* (Rs. 8) by Rabáris, and 14*s.* (Rs. 7) by a Bohorá's shop. A hearth, *chula*, tax of 4*s.* (Rs. 2) was paid by husbandmen; from 1*s.* to 7*s.* (Re. ½ - Rs. 3½) by oilmen; 1*s.* to 5*s.* (Re. ½ - Rs. 2½) by rice-pounders; 1*s.* 6*d.* to 2*s.* (12 *as.* - Re. 1) by market gardeners; 5*s.* (Rs. 2½) by Kolis; 4*s.* (Rs. 2) by trackers; a 1*s.* (8 *as.*) tax per head on milch buffaloes, *puchhi vera*, or tail tax, on all but cultivators; a tax of £10 8*s.* (Rs. 104) on the Dheds for sweeping the village threshing floor; £2 (Rs. 20) from the Vánia for weighing grain, and £2 (Rs. 20) on cattle graziers for manure. To the survey officers the rates seemed too high, and proposals were made for lowering th[illegible] Cap[illegible]ain Cruikshank's opinion irrigation was the chief [illegible]ct. To help irrigation he suggested that the rates on

---

[illegible] the land was divided into holdings, *khátás*; in 48 an acre-[illegible] 12 the crop was shared; in 41 the system was mixed, partly share [illegible]nd in 18 besides other assessment, a plough cess was levied. [illegible]en tilled by their owners paid their former quit-rents, when sublet, [illegible] Government rate was recovered from the tenant. Bom. Gov. Sel.

[illegible] rates varied in one group of villages from Rs. 2 to Rs. 9; in [illegible] to Rs. 11, and in a third from Rs. 8 to Rs. 14; millet and other [illegible] different groups from 8 as. to Re. 1, from Re. 1 to Rs. 3, and from [illegible]garcane varied from Rs. 13 to Rs. 22, and from Rs. 15 to Rs. 30. [illegible]s varied from Rs. 2 to Rs. 40. Bom. Gov. Sel. X. 110, 111. Captain [illegible]pposed to reduce the rates on the best land from Rs. 11 to Rs. 9, in [illegible]and from Rs. 10 to Rs. 8, and in third class land from Rs. 8 to Rs. 7.

wet crop land should be lowered, and that when a cultivator agreed to build a new well he should be granted remission of rent for a term of years. He also proposed that, for the use of husbandmen alone, a state savings bank should be started under the management and control of one of the most respectable village headmen.

Eastern Districts.

The eastern districts, now divided between Parántij and Modása, included, at the time of the survey (1824-1826), four petty divisions, Parántij, Harsol, Modása, and Báyad. Except in west Parántij, where the ground was open and well tilled, the country was wild and poor. In the eastern parts it was covered with a dense underwood, and, along the bank of the Sábarmati, was rough with deep and steep ravines. Under one manager, *kamávisdár*, each of the four petty divisions formed the charge of an outpost officer or *thánadár*. The only hereditary officer was a *desái*, and a sub-divisional accountant, *majmudár*, had been lately appointed. Two Vánia families, calling themselves *desáis*, did great harm by advancing money to the people. Village accountants were much scattered each with several small villages under his charge. Their records were vague and imperfect. In spite of the mixed territory, and the irregularity of boundary, the mere name of the British Government without force, prevented any attempt at revolt or disorder. Though for unguarded travellers some parts were still dangerous, the district had, especially in Parántij, in a few years made the greatest advance in order and security.[1] The unsettled, *mehvási*, tracts lay on the outskirts of the quiet villages. Their inhabitants, generally peaceable, were useful as a barrier against outside attacks. Its 243 villages were divided between the British Government and the Idar chief, 165 to Government, 69 to the chief, and nine shared between them but managed by Government. Of the 174 villages under Government management, four were alienated or *inám*[2]; five were held by a Musalmán proprietor; thirty-nine were under Koli or *mehvási* chiefs; and 126 were under direct management. Of the directly managed villages a complete field survey was made; of the proprietary villages the outer limits only were surveyed, and the Koli or *mehvási* villages were left entirely unnoticed. Of the thirty-nine *mehvási* villages, twenty-seven were in Parántij, eight in Harsol, one in Modása, and [illegible] in Báyad. The Parántij villages varied much in [illegible] under the Vághpur chief were well cultivated, [illegible] especially in Gámri, the people were under no c[illegible] the thickest forest, if any one in authority came [illegible] Harsol, except one rich village, the people were di[illegible] to a thick forest close by when threatened with dan[illegible]

---

[1] In Parántij, village after village had been re-established in pla[illegible] had to be cut through the forest, and a very extensive tract had l[illegible] tilled. Few spots remained untenanted and the rest though back[illegible] but surely improving. Bom. Gov. Sel. X. 3.

[2] The proportion of alienated land was low; the percentages wer[illegible] Harsol, 14; Modása, 6; Báyad, 12; Dholka, 44; and Daskroi, 33. Bom[illegible]

Chapter VIII.
Land Administration.

Survey, 1820-1826.

Eastern Districts.

were some well-to-do villages, and the people, once turbulent and troublesome, were quiet and orderly.

Of 176,615 acres of arable land only 59,323 were under tillage.[1] Cultivation was in a most backward state. In the best parts none but the poorest crops were grown, and, in the wild tracts, the Kolis and others, moving from place to place, burnt and tilled spaces in the forest. Throughout there was no measure of land in use. In every village were herds of milch cattle, and grazing profits formed an important part of the cultivators' gains. Except Parántij and Modása, towns of over 4000 inhabitants, and one or two other leading places, the villages were poor and miserable. They were without outward defence and without streets, the huts, for a tiled house was rare,[2] were either set round a square within which, at night, the cattle were kept, or each house stood by itself the whole straggling over a large stretch of country. With so little to lose by moving the people naturally did not stop in one place. Many for the sake of the advantages offered to settlers made a practice of changing their village every year or two. Whole villages were sometimes moved for the most trifling reasons, and all classes from the headman to the lowest cultivator looked on the desertion of a village, or, as they called it, the leaving it without lights, as a matter of very little moment. The population was very scanty and the cattle poor.[3] Of the large landholders, except the owner of one estate well managed by a Syed lady, the condition was most depressed. In Government villages the upper class of cultivators were in many cases deeply in debt, forced to stint themselves of every luxury, milk, butter, and all their dairy produce.[4] The lowest class of cultivators, too poor to have either debt or credit, were often forced to forestall their crops to raise grain to keep them alive till harvest.[5] The revenue £6208 (Rs. 62,080) in 1819, rose to £7916 (Rs. 79,160) in 1822, and again fell to £6216 (Rs. 62,160) in 1826.[6] The Koli villages were subject to no regular assessment. The chiefs or *thákors* paid a yearly sum to the British Government, and were left to

---

1 In Parántij of 83,910 acres only 36,749 were tilled; in Harsol, 4156 of 14,708; Modása, 10,276 of 49,912; in Báyad, 8142 of 28,085. Bom. Gov. Sel. X. 20.

houses only 5211 were tiled and most of the rest were mere hovels ut the weather, and always being destroyed. Of the 108 inha- no tiled houses, ten had from one to five, three had from five to n ten to twenty, and twenty-one had more than twenty. Bom.

. 41. So poor was their credit that they had to pay money- per cent a year as interest together with eight to ten per cent or twenty more to a Bhát as security. 'The Thákors were ished, and miserable.' Bom. Gov. Sel. X. 45.

X. 42. In Modása the survey officers notice the surprising s used for food. Bom. Gov. Sel. X. 8.

f grain borrowed in the hot season 1¼ to 1½ had to be paid at wanted for sowing was very commonly borrowed on the same terest at from 15 to 25 per cent, the lender required 5 to 8 per in This was added to the sum lent and interest was charged *mote* Gov. Sel. X. 42.

. X. 26. From the Government villages the details were 1819, , Rs. 53,59 ; 1821, Rs. 57,543; 1822, Rs. 59,702; 1823, Rs. 55,530; 1; 1825, Rs. 44,618; 1826, Rs. 47,297.

Survey, 1820-1826.

collect it from their cultivators as they pleased. This they generally did by levying a money sum from each according to his means. Few of the chiefs could write or keep accounts. In quiet Government villages the rent was recovered in about equal proportions from crop division and from plough cesses.[1] Though the land revenue demand was low[2] there were several other exactions. The Rajput and Koli chiefs' claims had been settled, and were paid from the Government treasury. But the Marátha grain and grass, *ghásdána*, levies, a tax of not many years' standing, was the cause of much distress.[3] The collections remained in abeyance from 1819 to 1822, and were then recovered with arrears. The money was advanced by one of the district revenue superintendents who established it as a debt on the different villages, recovering on its account a yearly surety charge, *manoti*, of five per cent and interest at twelve per cent. Besides this, horsemen and foot were from time to time billeted on the villages, and, in one of the years (1824), the whole charges amounted to an addition of forty per cent on the amount assessed and actually paid to the Gáikwár.[4] In the survey officer's opinion an effort should be made to raise the Koli chiefs from their lamentable state. In so poor a district crop-division seemed to him better than any rates that could be fixed. He thought that some encouragement should be given to building better houses, and special concessions granted to any one willing to make a well.

Dholka.

The lands included in the 185 Dholka towns and villages, surveyed between January 1823 and May 1824, had been under British control since 1803. In character and management they formed two well marked tracts, the east, or Government share, rich and well tilled, the west, or proprietors' share, salt, barren, and forbidding. The country was orderly; in every part of it person and property were safe. Of the 185 villages, 107 were held by large landlords, nine were alienated, and sixty-nine were Government[5] villages. Unless they failed to pay their contribution, the landlords were allowed to manage their

---

1 The Government share was generally one-third to one-fourth of the early, and one-eighth to one-tenth of the late harvest. Many small allowances, *bábtis*, were taken out of the crop before the division was made. But on the other hand probably as an indulgence on account of the wildness of the country, an allow from twenty to forty per cent was made in the cultivators' favou hundred *máns* as 80, 70, or 60. The share was fixed either while field, the *kaltar* system, or after it had been threshed, the Government share was offered for sale on the spot and the unsold chief place of the sub-division. Plough taxes were rather on the number of ploughs. They varied according to the cultivators' me £2 2*s*. (Rs. 4- Rs. 21). Bom. Gov. Sel. X. 30, 31.

2 The average acre-rates charged from 1819 to 1828 were, Parán 8¾*d*.; Modása, 3¼*d*.; and Báyad, 9*d*.

3 *Ghásdána* was first levied in Modása in 1794, and in Paránti Sel. X. 28.

4 The details were; paid to the Gáikwár, Rs. 601; Bhát secur per cent, Rs. 24; *desái's* original security at 5 per cent, Rs. 30 above at 15 per cent per annum, Rs. 43; advanced by the Bhát to t Rs. 81; interest on advance at 15 per cent, Rs. 14; pay to two of Rs. 13; expenses in entertaining the Bhát, Rs. 41. Total paid Rs. 847. Bom. Gov. Sel. X. 29.

5 Of the 107 proprietary villages, 64 were held by *Girásia* or Raj *Kasbáti* or Musalmán landholders. Bom. Gov. Sel. X. 33, 34.

Chapter VIII.
Land Administration.

Survey, 1820-1826.

Dholka.

villages as they chose, distributing the Government demand over their whole estate. An examination of their resources showed that, compared with the landlord, the Government territory had, per square mile, 87 houses to 23; 247 souls to 56; 138 head of cattle to 45; 24 ploughs to 9; 8 carts to 3; and yielded a revenue of £83 (Rs. 830) to £35 (Rs. 350). The tillage area in the proprietary villages was not ascertained. In the Government villages, of 138,800 arable acres, 74,518 were tilled, 64,050 waste, and 232 under dispute. The Government villages, though without any marked signs of wealth, were of respectable size, on the whole rather larger and more uniform than in Daskroi. The proprietary villages varied greatly in the different estates. In one, the houses were more often thatched than tiled, in another they were generally comfortable looking, and in two more showed little care and much room for improvement. The Government lands were on the whole well peopled, and in the south-west large areas were wanted for grazing and an increase of population was perhaps not advisable. But in the north and centre, the population might, with advantage, have been increased fourfold. Almost all the proprietors were in debt; scarcely any of them were able to sign their names; they were lazy, careless, and given to opium; almost all of them were in the hands of some hard and crafty Vánia. In the Government villages even the better class of husbandmen were in debt. Suits were frequently filed against them, and their property sold. The low state of their credit checked any agricultural improvement. The revenue, in 1817-18, £45,232 (Rs. 4,52,320), rose in 1820-21 to £48,679 (Rs. 4,86,790), and from that, chiefly because of a year of short rainfall, fell to £34,108 (Rs. 3,41,080). Unless on failure of rent, the large landholders were allowed to manage their villages as they chose, distributing the Government demand over their whole estate. From private or alienated lands, so long as the owner tilled it, the chiefs recovered nothing. But when tilled by any one but the owner, the landlord took one-sixth share of the produce. From their own land, rents were recovered in kind, certain allowances, *bábtis*, being first taken from the whole, and of the remainder from a third to a half belonging to the chief. Besides the crop share a plough and other taxes were levied.[1] The Government villages would seem to have been all simple. Rent-free lands, except those held [illegible]ious persons and village servants, paid, as a rule, a tax equal [illegible] the regular Government assessment. On Govern- [illegible] was no fixed system of assessment. According [illegible] yielded, they were divided into garden, *máliát*;

[illegible]llage Dugari is given as an example of the system. From the total [illegible]ll allowances were made. These were in a *man* of forty pounds, [illegible]ief; ¼ pound to the weighman; one pound to the watchman; [illegible]nger, and ½ pound to the village establishment. In addition to [illegible]an had to give 5 pounds to the village head; 20 pounds to the [illegible]gs; 10 pounds to the Musalmán saint; 10 pounds for the manager's [illegible]for the chief's travelling expenses. After these allowances were [illegible]nainder was the chief's share, or of 100 parts about 7 would go in [illegible]e husbandmen, and 48 to the chief. With the wheat harvest the [illegible]omewhat different. About 30 per cent were first set apart to meet [illegible]cost of seed and labour, and of the remaining 70 per cent, 5 went in [illegible] the cultivator, and 35 to the chief. Bom. Gov. Sel. XI. 40, 41.

Chapter VIII.
Land Administration.

Survey, 1820-1826.

Viramgám, 1825.

rice, *dángaria*; wheat, *ghauvar*, and dry grain, *bájria*. Of each class the lands were arranged into three sorts, first, second, and third, and the assessment was recovered partly by crop division, partly by acre-rates, partly by both systems, and partly by taxes.[1]

The survey of Viramgám, in progress during 1825 and 1826, was not finished.[2] In the east was some thick woodland, in the centre grass plains, and in the west barren salt wastes. Except Chuvál in the north-east, the whole was bare and bleak. Order had not been thoroughly established. In 1824, the year before the survey, the Chuvália Kolis had revolted, and a force had to be sent against them to bring them to order. The disturbance was promptly suppressed, but they still remained a troublesome body of organized robbers. Its 164 villages were divided into three groups, the Daskroi, the Chuvál, and the Pátri. Of the whole number only seventy-five were Government villages. Of the Daskroi group, two were alienated and thirteen were in the hands of Musalmán and Rajput landlords. The Chuvál group was distributed among Koli chiefs, and the Pátri villages formed the estate of the Kanbi *desái* of that fort. None of the large landholders' villages and only fifty of the Government seventy-five were surveyed. Of the area under cultivation in the landlords' villages no details were collected. In the fifty surveyed Government villages, of 148,543 arable acres, only 39,233 were under tillage. Grazing was a very important source of revenue, and the practice of yearly burning the grass had only lately been stopt.[3] Except Viramgám, a town of some trade and wealth, the villages were small and ill-built. The disturbed state of the country had in almost all cases made some sort of defence necessary. Many villages had no shelter but a slight hedge. But towards the Nal lake some were surrounded by a mud wall, and others had small round towers of mud, brick, or stone, open at the top, and pierced with loopholes for musketry or arrows. In the north-east the Chuvália Kolis had their villages most carefully fortified. First was a deep ditch, and then a thick milk-bush, prickly-pear,

---

1 The details of 23 garden villages were; 1 was assessed by crop division, 5 partly by acre-rates partly by crop share, and 17 by acre-rates. The rates were sugarcane Rs. 10 - Rs. 30 a *bigha*; plantains Rs. 12 - Rs. 30; ginger Rs. 7 - Rs. 20; vegetables Rs. 5 - Rs. 13; rice best land Rs. 6 - Rs. 8½, middling Rs. 5 - Rs. 7½, poor Re. 1 - R[illegible] wheat Rs. 2 - Rs. 4; tobacco Rs. 6 - Rs. 12. Of 9 rice villages, 5 were [illegible] rates, 4 by crop share, and 4 of the 9 paid a plough cess of from [illegible] shares varied from a third to a half, and the rates, on the bes[illegible] Rs. 12, on middle from Rs. 8 to Rs. 10, on poor from Rs. 6¼ t[illegible] millet villages four were share and fourteen acre-rates. In five o[illegible] Rs. 4 to Rs. 14 was paid. In the share villages the share was on[illegible] villages, the rates varied on the best land from Rs. 3 to Rs. 4½, [illegible] to Rs. 3½, on third class from Rs. 1½ to Rs. 2½. Of sixteen whe[illegible] produce was shared, and in eleven acre-rates were levied. In si[illegible] from Re. 1 to Rs. 8 was paid. The share was one-half and the r[illegible] to Rs. 4 on first class; from Rs. 2½ to Rs. 3½ on second class [illegible] Rs. 2½ on third class land. Bom. Gov. Sel. XI. 21, 22, 23. The ta[illegible] the different villages. Among them were taxes on ploughs, cat[illegible] grocery, and manure, and caste cesses on tailors, graziers, potters, [illegible] Gov. Sel. XI. 24, 26.

2 No date is given. It was begun after Parántij and the rep[illegible] October 1827.

3 Bom. Gov. Sel. X. 72. Much of it was excellent pasture, in th[illegible] who had a breed of cattle superior to that in the south.

Chapter VIII.
Land Administration.

Survey, 1820-1826.

Viramgám, 1825.

or other thorny hedge with only two entrances, each by a narrow winding path. Inside, the houses were separate, each surrounded by a six foot high mud wall topped with brambles and at intervals with small loopholes. After the disturbance of 1824 and 1825 the thick hedges were cut away, and the defences dismantled.

Almost all the large landholders were hopelessly sunk in debt. The Kasbátis were completely in their agent's hands, and so deeply involved in debt as to be utterly unable to improve their estates. The Koli chiefs were in great money straits, and from their ignorance and carelessness suffered much from decrees given against them by the civil courts. The *desái* of Pátri, unable to meet his creditors' demands, had been sent to prison in Ahmedabad. In the Government villages, the people were poor and depressed. Exclusive of the fixed payment from the Pátri chief, the revenue of the district rose from £6405 (Rs. 64,050) in 1818, to £10,780 (Rs. 1,07,800) in 1826.[1] All large landlords' estates were, from year to year, assessed at a lump sum. Of this the landlord paid two-thirds to Government and kept the remaining third for himself.[2] In the Government villages there was a large area of alienated land, 20,059 acres, compared with 30,365 acres of arable Government land. Kolis and Rajputs who held private lands, and watchmen and others who had a claim for service land, were, on payment of a plough cess, allowed to till what lands they chose. Lands tilled in this way by village servants continued to stand as Government lands. Such a system could answer only in a wild waste country. In Government lands the assessment was levied by a crop division supplemented by taxes on ploughs. A system of allowances, *bábtis*, from the crop had been in use; the allowances were done away and their value added to the plough tax. This change was unpopular as it increased the proportion of the demand that did not vary according to the harvest.[3] Plough taxes were also levied and, to include the small holders, the plan was in force of charging one man with one bullock as half a plough, one man with two bullocks as three-quarters, and one man with three bullocks, or two men with two bullocks, as a whole plough.[4] The survey officer approved of the system of basing the Government demand on a share of the produce. He thought that in a country [illegible] so uncertain a rainfall, and whose water storage depended on the [illegible] fixed acre-rate could not safely be introduced.

[illegible] 1818, Rs. 64,053; 1819, Rs. 66,619; 1820, Rs. 80,576; 1821, [illegible] 81,897; 1823, Rs. 86,105; 1824, Rs. 87,737; 1825, Rs. 27,501; [illegible] om. Gov. Sel. X. 60.

[illegible] di villages the chief's share was, instead of 30 per cent, an exact [illegible] Bom. Gov. Sel. X. 58.

[illegible] e produce of village headmen's land was generally rated one share [illegible] other cultivators, the Government share was usually one-third, [illegible] e of rice, one-fourth. This was locally expressed, one for Govern- [illegible] or four for the cultivator. In some cases the cultivator [illegible] share in virtue of a custom which gave a fourth or a half allowance [illegible] other words 125 or 150 *mans* were estimated and assessed as only [illegible] el. X. 62.

[illegible] el. X. 63.

Chapter VIII.
Land Administration.

1825-1830.

During the rest of this period (1825-1830) the fall in produce prices put a stop to the rapid spread of tillage that had marked the first years of British rule.[1] Still, in 1830, Sir John Malcolm found the state of the district satisfactory. Mr. Elphinstone's changes had worked well, and the position of the proprietary class was improved. This class might, Sir John Malcolm thought, be treated with still more consideration. He suggested that, as had been done to the nobles of the Deccan, the Ahmedabad proprietors might, as regards the civil courts, be placed in a special position.[2]

The following statement contrasts the tillage area, resources, and revenue of the different parts of the district surveyed between 1820 and 1826:

Ahmedabad Survey Details, 1820-1826.

No.	Sub-division.	Villages.	Per cent of arable land tilled.	Average per square mile.					
				Houses.	Souls.	Cattle.	Ploughs	Carts.	Revenue in £.
1	Daskroi	146	58·24	63	207	156	22	7	86
2	Dholka, *khálsa*	66	59·47	87	247	138	24	8	83
3	Dholka, *tálukdár* ...	107	...	23	56	45	9	3	34
4	Parántij	66	56·34	35	123	117	12	2	23
5	Harsol	10	32·16	23	70	82	9	1	6
6	Modása	35	22·98	31	95	90	10	2	8
7	Báyad	15	29·85	23	77	85	11	2	6

Fourth Period, 1830-1853.

Between 1830 and 1853, when a fresh survey was begun, the district, after in 1833 recovering from the very great depression in produce prices, had until 1840 a time of rather high prices, followed by another long period of depression. In 1844, though after two years of low prices, the husbandmen's state is said to have been satisfactory, and much better than the general condition of the Deccan people. The villages were generally of substantial brick and tiled houses, with only a small proportion of huts. In some of the larger villages were houses with upper stories, and the people seemed in possession of every ordinary comfort. Even the lower classes were well clothed, the common Kolis and poorer cultivators wearing a fair share of the usual strong cloth.[3] After 1844 the husbandmen suffered from a fall in produce prices. I[illegible] district passed through a time of much hardship, and o[illegible] returns for the ten years ending 1853, show little, i[illegible] in tillage and resources. During this period the chi[illegible] revenue management were the settlement with the vi[illegible] of with the village headman; the gradual revisio[illegible] inequalities came to light; and the change, over the g[illegible] the district, from a crop-share to a money acre-rate.

1 Indian millet rupee prices fell from 46 pounds in 1825 to 120 [illegible] and 1830.
2 Bom. Gov. Litho. Papers, 149, 38.
3 Mr. Fawcett's 170, 30th December 1844.

Chapter VIII.
Land Administration.

Daskroi, 1820-1860.

The following details show the changes introduced and the progress made in different parts of the district. During the forty years (1820-1860) between its first and second survey, two chief changes were made in the mode of levying the Daskroi land revenue. The first of these was in 1822, when the Government share of the crop was taken in money instead of in grain. The second was in 1837, when instead of a payment based on the value of the crop, a money rate on the land was charged.[1] Between 1828 and 1859, the chief changes in cultivation were a steady decline from 58,357 acres in 1829 to 23,268 acres in 1833, then a rise to 47,161 acres in 1835, and from that a steady rise to 60,925 acres in 1840. From 1840, except in four years,[2] the area varied between 60,000 and 63,000 acres. Between 1853 and 1858 the area fell to 54,000 acres. But by 1859 it had again risen to 59,000 acres. Except in 1832, when £1000 (Rs. 10,000); in 1833 when £1600 (Rs. 16,000); and in 1848, when £4300 (Rs. 43,000) were granted, remissions were small. Over the whole period they averaged only 3·64 per cent of the gross assessment, and especially during the last seven years (1853-1859) they were almost nominal. Compared with the returns of 1820 those of 1860 shew an advance in population from 45,552 to 78,392, or about 72·34 per cent; in houses from 13,529 to 25,907, or 91·49 per cent; in wells from 1269 to 2004, or 58·39 per cent; in ploughs from 5000 to 8000, or 60 per cent, and in tillage from 72,803 to 98,366 acres, or 35·11 per cent.[3] But at least in the important matter of tillage this increase would seem to have been almost entirely confined to the first ten years of the period. In 1828, 55,333 acres were under tillage, and the increase to 59,684 in 1859 was one of only 7·87 per cent.

Parántij, 1824-1860.

During the thirty-five years between 1824 and 1860, the dates of its first and second surveys, the chief change in the revenue management of Parántij and Modása was, in place of the old crop-share and plough-tax assessments, the settlement of a fixed money acre-rate. This change, partly in 1838 and partly in 1850, was introduced into all but three villages, whose lands were distributed on the holding, *khátábandi*, system.[4] In the other villages the new money acre-rates were fixed by village committees. In each village, to fix the rates, the land was brought under two main classes, rain-watered,

---

ere, by Mr. Jackson in 1837, 8 villages; by Sir R. Arbuthnot in illages; and by Mr. Fawcett, between 1849 and 1856, 38 villages. ec. 240 of 1862-64, 234. The results were that,—while in 1820 of 118 arehold and of the rest in 3 the assessment was levied on holdings, s, in 17 by crop-rates and in 87 by a mixture of the other systems— a lump sum, in 3 the assessment was on holdings, in 15 there were re-rates, and 45 were mixed.

ere in 1842, 59,000; in 1847, 59,000; in 1848, a year of short rain- es), 53,000; and in 1850, 58,000 acres. Bom. Gov. Rev. Rec. 240 of

are, in dry crops from 57,883 to 75,877; in garden land from 9851 n rice from 5069 to 9055. These figures are only approximately ov. Rev. Rec. 240 of 1862-64, 240.

ing, for a term of years, a sum fixed on the entire holding and levied rea, whether fallow or tilled.

Parántij, 1824-1860.

akáshi, and well-watered, *kuitar*. The rate in each case depended on two chief considerations, the field and the holder of the field.

As regards the field, the chief points were its soil, of first, *aval*, second, *doyam*, or third, *soyam*, quality, and its position, liable to be harmed by robbers, wild beasts, or floods, and near or far from a market. As regards the holder of the field, the chief point was his caste, whether he was a Kanbi or a non-Kanbi. In either class the rates varied according to the individual's wealth and position. So great was the weight given to considerations of caste and personal wealth, that in two villages with much sameness of soil and place, the average dry-crop rates were 4*s*. (Rs. 2) in one and 2*s*. (Re. 1) in the other.

On their introduction in 1837, the new rates did not seem successful. In 1838 the tillage area fell from 27,000 to 25,000 acres and large remissions had to be granted. But 1838 was a specially bad year. A change for the better soon set in, and the area rose rapidly to 35,000 in 1839, 43,000 in 1840, and 46,000 in 1841. In 1842 it was 44,000, and after being fairly steady at about 47,000 for the next five years, fell again to 42,000 in 1848. In 1849 it rose to 51,000, and in the next nine years varied between 50,000 and 57,000 till in 1859 it rose to 62,000. The collections of land revenue advanced steadily from £4000 (Rs. 40,000) in 1837, to £6700 (Rs. 67,000) in 1846, and then, after a sudden fall in 1848 to £4700 (Rs. 47,000), rose in 1849 to £6300 (Rs. 63,000), and from that with fairly steady progress to £7400 (Rs. 74,000) in 1859. Compared with the returns of 1825, the figures for 1860 show an increase of population from 24,887 to 44,755 souls, or 80 per cent; of houses, from 7267 to 13,571, or 86 per cent; of ploughs, from 2990 to 6431, or 115 per cent; and in built working wells, from 336 to 529, or 57 per cent; the tillage area had spread, from an average of 29,204 acres in the three years ending 1839, to an average of 57,459 in the three ending 1859, an increase of 97 per cent, and while remissions had averaged only two per cent, the revenue for the same years had risen from £4545 (Rs. 45,450) to £7185 (Rs. 71,850), or 58 per cent.[1]

Viramgám, 1825-1857.

The management of the Viramgám subdivision between 1825 and 1857 was successful. In the 77 Government villages, tillage spread from about 31,350 to nearly 58,900 acres, or 88 per cent, and population [illegible] far as materials for comparison were available, had rise[illegible] Between 1825 and 1856, in 55 of the 77 Viramgám [illegible] villages, the crop-share and plough cess systems were [illegible] money acre-rate. Of the 55 villages, 38 were changed b[illegible] in 1838, and in 1850 Mr. Fawcett introduced ne[illegible] villages, nine of them, it would seem, already settled b[illegible] In twelve the crop-share system was continued. In t[illegible] settled, Mr. Jackson (1838) introduced two sets of rate[illegible] land, under the former system liable only to the cro[illegible] higher for land that had paid a plough cess be[illegible] share. Mr. Jackson's rates were low, reducing the [illegible]

[1] Bom. Gov. Rev. Rec. 91 A. of 1860, 86-165.

Chapter VIII.
Land Administration.

Viramgám, 1825-1857.

crop acre charge from Rs. 1-7-6 to Rs. 1-5-8. In the 26 villages settled in 1850 the rates were fixed by village committees, averaging for dry crops Rs. 1-11-2 an acre. During the thirty years ending 1856-57, the chief changes in the tillage area, were, from 1826 to 1831, a steady rise from 31,500 to 41,000 acres; then in 1832 and 1833 a sudden and serious fall to about 15,500, followed in 1834 by a dash upwards to 33,500. From 1834 except for a slight drop of about 4000 acres in 1838, and between 1846 and 1848 a larger fall of about 6500 acres, the area had pretty steadily increased to 62,000 in 1856. During this time the Government assessment only rose from £8500 (Rs. 85,000) to £10,400 (Rs. 1,04,000), or 22·35 per cent. In the assessment the chief changes were, in the three years ending 1828-29, a fall from £8500 (Rs. 85,000) to £6300 (Rs. 63,000), and then, after a slight rise, a sudden drop in 1833 to £4000 (Rs. 40,000); then followed a rapid rise to £7200 (Rs. 72,000) in 1834, and £9000 (Rs. 90,000) in 1836, and then with two drops, one in 1838, the other in 1848, on the whole a rise to £11,200 (Rs. 1,12,000) in 1852. In 1853 the revenue dropped to £9200 (Rs. 92,000), and from that rose to £10,000 (Rs. 1,00,000) in 1855, and £10,400 (Rs. 1,04,000) in 1856. Except in three years, 1832, 1838, and 1848, when large sums had to be given up, the remissions were on the whole small, and during the three years ending 1856-57 they were insignificant.[1]

Dholka, 1823-1853.

During the thirty years between its first and second survey (1823-1853), acre-rates were introduced into thirteen Dholka villages, into four in 1842, and into nine in 1851-52. Except for this, and that the settlement was with the villagers instead of the village headman, no change was made. As regards the area under cultivation, of about 121,847 acres of Government land and 68,268 acres of alienated land, about 48,126 and 48,336 respectively were under tillage in 1825-26. During the thirty years between the first and second survey (1823-1853), the tillage area of alienated continued greater than that of Government land, ending in 1852-53 with about 57,222 acres compared to about 46,537 acres. Throughout the whole period the fluctuations of tillage in alienated and Government lands very closely corresponded. The changes in the tillage area of Government lands, were, in 1825 and 1826, a rise from about 48,126 about 52,330 acres; then, in 1829, a fall to 46,120; and next, in 53,574 acres. From that, the highest point reached le period, there was a rapid fall to 37,025 in 1833, ise to 46,567 in 1835, and after that it changed little fell to 33,342, its lowest point. In 1839 it rose to alling again in 1840 to 42,122, and after varying for ween 48,096 and 49,865, in 1844 fell again to near In 1846 it rose to 47,655, and after, in 1848, falling was in 1850 as high as 50,925, from which, during

---

urvey Report 119, 30th December 1857. In 1832 about Rs. 23,000, 24,000, and in 1848 about Rs. 26,000 were remitted.
n b*ighás* are only rough as they were made out in estimate or *ásra*
ov. Rev. Rec. 135 of 1858, 175.

the two remaining seasons, it only slightly fell. During this period, the assessment on Government lands was reduced from £23,100 (Rs. 2,31,000) in 1825-26 to £18,900 (Rs. 1,89,000) in 1852-53. Its lowest point was £13,400 (Rs. 1,34,000) in 1833-34, and its highest £25,200 (Rs. 2,52,000) in 1841-42. The realizations generally fell somewhat short of the assessment. In 1833 they were about £1200 (Rs. 12,000) short, and in 1848-49 about £1000 (Rs. 10,000). But the only marked year was 1826-27, when, from loss caused by a plague of mice, out of £24,300 (Rs. 2,43,000) only £20,100 (Rs. 2,01,000) were recovered. On the whole the period had been one of depression. Population had increased by 22 per cent, but the area under cultivation had not spread, and there was much difficulty in realizing the revenue. In many cases cultivators were for years unable to pay the whole of their rent, and the Government outstandings of a bad season were collected in driblets over a course of years.

Dhandhuka.

Of the south-western districts, Dhandhuka and Gogha, very few details are available. As they were chiefly proprietary, *tálukdári*, villages, no inquiry into their condition was made at the time of the first survey, and on the basis of a rough calculation, the villages were held on leases at a certain lump sum. Of the state of Dhandhuka no details are available. In Gogha, of a total of sixty villages, only four belonged to Government. Into the state of the four Government villages no inquiry had been made at the time of the first survey. Since 1830 two changes had been made in their revenue management. In 1839 the lands were divided into two main classes, garden and dry crop, and uniform rates imposed upon each. In 1850 a more elaborate system was introduced. Each of the main classes was divided into three grades, a first, a second, and a third, and rates were fixed by village committees. Between 1839 and 1850, tillage spread from 1686 to 1953 acres, and revenue rose from £229 to £244 (Rs. 2290 - Rs. 2440). Except in 1842, when £16 (Rs. 160) were granted, there were no remissions. Between 1851 and 1856, the tillage area fell from 1953 to 1897 acres, and the revenue fell from £244 (Rs. 2440) to £221 (Rs. 2210). In 1850, £10 (Rs. 100), and in 1851, £9 (Rs. 90), were remitted. Since 1852 the full assessment had been realized.

Though something had been done to make the s
even and the system of assessment less varied an
variety and confusion prevailed, and it was thought
of the district the rates were excessively high.[1] A
the survey and assessment of Dholka was begu
found in introducing the rates and final sanction v
1858. Of the rest of the district, Dhandhuka w
Viramgám in 1857; Daskroi in 1860; Parántij in
now part of Daskroi, was surveyed in 1858, but no
1863. Two parts of the district, the *tálukdári* estat

1 There were at least sixteen modes of levying the rent in
three and four in the same village, Mackay's Western India, 10
below.

Chapter VIII.
Land Administration.

Survey, 1853-1863.

the Parántij *mehvási* villages were not brought under the survey. The period of this second survey lasts through the years of the great rise in prices, when burdensome rents grew light, and, almost the whole peasantry, changed poverty and depression for comfort and wealth.[1] The following details show the state of each sub-division at the time of survey and the changes then introduced.

Dholka, 1853.

Except in the north-east, where was a stretch of woodland, Dholka was in 1853 flat and without timber. Near the Sábarmati the soil was a rich alluvial, and in other parts either black or white with endless gradations. Of 182 villages ninety-five were Government, seventy-nine proprietary, and eight alienated. Dholka was the only market, Sánand was not of any size, and of the little export trade that might have gone to Dholera, much was kept back by the want of a bridge over the Bhogáva river. In 1853 so large was the waste area that in the yearly auction it yielded nothing. Herds of Rabáris' cattle roaming about did much damage to the crops, and garden cultivation had of late years been rapidly declining. The houses were large and well built, and the people well clothed, and, to a chance observer, they might seem well-to-do. But inquiries showed that almost all were deep in debt, even for tillage charges dependent on money-lenders. Of capital there was scarcely any. Most of the landholders were practically labourers living from hand to mouth, their creditors absorbing the surplus produce of their lands. The considerable increase of population, the fall in produce prices, and the narrowing of the tillage area, seemed to show that the body of the people were poorer than they had been thirty years before. The revenue management of the district was defective. It was too large a charge[2] for one *mámlatdár*. The management had been lax, and the records were meagre. Tillage returns were in *ásra* or estimated *bighás*, and remissions and realizations were brought to account on no fixed plan. In the system of assessment there was still great variety. Of ninety-five villages, twenty-two were settled by acre-rates, thirty-five by crop-shares, and six by a mixture of both. Eleven had acre-rates and a plough tax; three had crop-shares and a plough tax; three had acre-rates, crop-shares, and a plough tax; [illegible] crop-shares and a lump sum on individuals; and thirteen [illegible] acre-rate. The survey officer, while tracing much [illegible] the great fall in produce prices,[3] thought that [illegible] over-assessed.[4] In dry crop lands, instead of the [illegible]verage acre charge of 7*s.* 11*d.* (Rs. 3-15-4), the [illegible]sed to group the villages into five classes; the first, [illegible]ages, to pay an acre-rate of 4*s.* 6*d.* (Rs. 2-4-0); the [illegible]ne villages, to pay 4*s.* (Rs. 2); the third, with

---

[illegible]dian millet rose from eighty-two pounds, the average for the [illegible] to forty-four in the five years ending 1863.

[illegible] square miles in area, was equal in size to two-thirds of Surat, [illegible]d, while Nadiád had eighty-two and Broach ninety villages, [illegible]. Gov. Rev. Rec. 135 of 1858, 201, 202.

[illegible] had fallen fifty per cent. Bom. Gov. Rev. Rec. 135 of 1858, 193.

[illegible] of the crop rates was much greater than of the crop-share, [illegible]ompared with Rs. 3-2-5. Bom. Gov. Rev. Rec. 135 of 1858, 279.

Chapter VIII.
Land Administration.
Survey, 1853-1863.

sixteen, to pay 3*s.* 6*d.* (Rs. 1-12); the fourth, with twenty-five, to pay 3*s.* (Rs. 1-8); and the fifth, with three, to pay 2*s.* (Re. 1). On rice lands, instead of a maximum of £1 13*s.* 1½*d.* (Rs. 16-9), he proposed 16*s.* 6*d.* (Rs. 8-4), six rupees of water rate and Rs. 2-4 of land cess. These changes involved a loss of about 37 per cent of revenue. As regards the management of waste lands, the survey officer proposed that in the case of the Rabáris, or professional herdsmen, instead of a herd tax, payment on every head of cattle should be made. But Government thought that such a tax would require too minute supervision, and ordered that grazing lands should be leased. Among other improvements the survey officer suggested that roads were wanted and that the building of wells should be encouraged; he had found hundreds of wells brackish and useless.

Viramgám, 1857.

In 1857, at the time of survey, of the 150 Viramgám villages seventy-seven were Government and the rest proprietary.[1] Though the state of Viramgám was satisfactory, population was scanty, and besides 72,500 acres of arable waste much good land was so thickly covered with brushwood that it was classified as unarable. The waste lands supported large herds and flocks, some of them belonging to strangers and the rest to resident cattle-breeders. The water-supply was poor. The ponds depended entirely on local rain, and the wells were apt to grow brackish. Garden tillage was almost unknown; wheat and barley, watered from unbuilt wells, were the only irrigated crops. Besides Viramgám, Pátri, and Mándal, there were several large markets in the country round. The average land revenue, realized during the ten years ending 1855-56, was £9948 (Rs. 99,480); in 1856-57 it was £10,363 10*s.* (Rs. 1,03,635.) Classifying them on the ground of nearness to market, the survey officer arranged the villages in four groups; the first of 14, the second of 37, the third of 24, and the fourth of 4 villages. The dry crop acre-rates were 4*s.* (Rs. 2) in the first group, and each of the other groups was 6*d.* (4 *as.*) less than the group above it. Over the whole dry crop area the average acre-rate was 2*s.* 7½*d.* (Rs. 1-5.) The survey officer was of opinion that water-rates should be kept separate from land-rates. For pond water the highest acre-rate was 11*s.* (Rs. 5-8), and for well water 16*s.* (Rs. 8) a bag from permanent, and 10*s.* (Rs. 5) from temporary wells. Grazing fees should, the survey officer recommended, be levied at different rates from resident and from stranger graziers.[2] The result of the new rates was, in a revenue of about £11,000 (Rs. 1,10,000), a reduction of between £2200 and £2300 (Rs. 22,000 - Rs. 23,000) or about twenty or twenty-one per cent.[3] The settlement of cesses and quitrents on alienated lands was comparatively simple. These proposals were approved and a thirty years' guarantee granted from 1857.

---

1 In 1826 there were 75 Government villages. Two of these were afterwards treated as proprietary, and three new hamlets were raised to be villages. According to this the number would be 76 and not 77.

2 The proposed rates were for resident graziers, one pie a head for sheep and goats, and nine pies a head for cattle. For non-resident graziers one anna a head for sheep and goats, and six annas for cattle.

3 Mr. Rogers' Survey Report 119, 30th December 1857.

Chapter VIII.
Land Administration.

Survey, 1853-1863.

Dhandhuka, 1856.

In 1856, at the time of survey, there was much waste land in Dhandhuka. Round Dholera the country was bare and bleak; the water was salt, and the people were poorer than in the inland districts. Dhandhuka had not been included in the former survey. The revenue and other statistical details were imperfect and unsatisfactory, and the nominal tillage area was misleading. The revenue had been collected on the crop division, *bhágvatái*, system. The chief markets were Dhandhuka, Dholera, and Ránpur. Proposals made for twenty-nine villages, twenty of them Government, *khálsa*, and nine proprietary, *tálukdári*, with dry crop rates, varying from 2*s*. to 5*s*. (Re. 1 - Rs. 2-8), involved a reduction of about twenty-nine per cent on the former rental.[1]

Gogha, 1858.

In 1858, at the time of survey, the Gogha villages are described as poor, yielding much grass. Of a total of 20,527 *bighás*, 14,024 were waste and 6503 tilled. The revenue was £222 6*s*. (Rs. 2223). Except a few fields the lands of the town of Gogha were alienated. Among them, of 5578 arable acres, only 3272 were tilled. Gogha is said to have been flourishing, and two of the other three villages had improved under their former settlement. The third village was in a depressed state. Except a slight lowering of average rates, involving a reduction of about twelve per cent, few changes were made.[2]

Daskroi, 1860.

In 1860, the year of its second survey, Daskroi is described as somewhat bare and unfruitful to the west, but on the whole well wooded and well tilled. Of the 134 villages, fourteen were alienated, and of fifteen of the rest the people lived in Ahmedabad. Of the constitution of the 119 Government villages, one was sharehold and the rest simple. They formed three nearly equal groups, Kanbi, mixed, and Koli villages. The Koli villages were poor, the houses mean and uncomfortable, and the cultivation slovenly. But the rest, especially the Kanbi section, had many substantial tiled two-storied dwellings, well stored with furniture and household goods. In spite of the improvements that had from time to time been made, there was great want of uniformity in the matter of assessment. In some villages the holding system was in force, in others crop-rates, in others acre-rates, and in nearly a third of the whole, more than one of these systems was in use in the same village. Though the former survey had measured the village lands and numbered and registered the fields, it had not mapped them or shewn their limits by boundary marks. The actual occupation did not agree with the old fields, and an entirely new measurement was found necessary. During all but the early years of the last period (1820-1860) tillage had spread but little.

---

1 Bom. Gov. Rev. Rec. 135 of 1858, 304, 306. On rice lands a Rs. 3 water-rate was, as in Dholka, to be kept separate from the dry rate, and charged only when wet crops were grown. Bom. Gov. Rev. Rec. 135 of 1858, 305. Fields watered from streams had no permanent supply, and were therefore made liable only to a water-bag cess. Fields watered from wells were to have the land and water rates in one. Bom. Gov. Rev. Rec. 135 of 1858, 306.

2 The maximum dry crop rates were Rs. 3 an acre for Gogha, Rs. 2-8-0 for Bhekra, Rs. 2 for Khokra and Karera. The maximum garden rates were Rs. 5 per acre. Bom. Gov. Rev. Rec. 139 of 1875, 203. The net reduction of demand was Rs. 263. Bom. Gov. Rev. Rec. 116 of 1868, 316.

Chapter VIII.
Land Administration.

Survey, 1853-1863.

1858-1863.

Of the sixty-two villages of the Jetalpur sub-division,[1] surveyed in 1858 but not finally settled till 1863, fifty-seven were Government and five alienated. As regards the management and assessment of the alienated villages, no details were recorded. But in the Government villages, though all but one were simple, there was the greatest variety in the land assessment. In nine there was a crop-rate, in thirteen an old acre-rate, in one crop division, and in thirty-five revised acre-rates introduced between 1837 and 1853.[2] In 1858, of a total of 64,860 acres of arable Government land, 33,857 were under tillage. The rental was lowered from £15,638 to £12,679 (Rs. 1,56,380 - Rs. 1,26,790). Under the new rates considerable progress was made. Before 1863 when the rates were finally settled, the tillage area had spread by 13,748 acres, and the revenue increased by £4414 (Rs. 44,140). The assessment of this sub-division was not thought satisfactory. Its dry crop-rates were considered too low and its rice-rates too high. On these grounds only a ten-year guarantee (1863-1872) was given. As Jetalpur was broken up and its villages distributed over Daskroi, Sánand, Mátar, and Mehmadabad, it was afterwards decided that the revision of the several villages should take place when the guarantee of the sub-divisions to which they had been attached expired. In 1863 (February 14th) when all survey operations were finished, the district was reported flourishing. Waste lands were daily being brought under tillage, revenue was rising, the villages were prosperous, and the people contented and gradually growing rich.

Parántij, 1860.

Except for thick brushwood and forest on a range of low hills on the north, and on the steep banks of some of the rivers, Parántij was, in 1860, on the whole, well cultivated. Harsol was open with a few rocky hills. But, except where cleared near villages, Modása and Báyad were covered with thick brushwood. In Parántij the soil was chiefly light, with a little medium and no black. In Modása it was variable, some of it black and most red, poor in the north, and richer in the south. The water-supply was plentiful, and there was a little irrigation from wells. There were no made roads, but in the dry season the tracks were fairly good. Of a total of 176 villages, 116 were Government; eleven were shared between Government and the chief of Idar; four were alienated, *inám*; five belonged to a Musalmán proprietor; and forty were held by Koli or *mehvási* chiefs.[3] In the Government villages, of a total of 140,382 arable acres, 61,780 or 44·01 per cent were under tillage. With scanty irrigation and too little capital to grow sugarcane, all the tillage

---

1 The new rates were introduced in 1858-59. Gov. Res 2353, 22nd June 1864, and Bom. Gov. Rev. Rec. 240 of 1862-64, 177, 211. The Jetalpur sub-division was formed in 1840 (Gov. Res. No. 873) of forty-three Daskroi and five Dholka villages. To these in 1852 (Gov. Res. 5727, 23rd Sept.), to bring all the villages drawing water from the Khári river into one sub-division, fourteen Mátar villages were added. Bom. Gov. Rev. Rec. 240 of 1862-64, 182. In 1863 Jetalpur ceased to be a distinct sub-division.

2 This gives 58 villages, Bom. Gov. Rev. Rec. 240 of 1862 64, 182.

3 As regards the eleven shared villages, arrangements have been made that four, Choila, Gábat, Vaniyád, and Báyad, should be handed over to the Idar chief and seven kept by Government Gov. Res. 7217, 4th December 1877. The Musalmán proprietor was a Syed said to be the lineal descendant of Pir Kamál to whom the whole sub-division was once granted by the Musalmáns. Bom. Gov. Sel. X. 19.

Chapter VIII.
Land Administration.

Survey, 1853-1863.

Parántij, 1860.

was dry crop. Manure was little used, and fallows were common, the cultivators drawing some income from cattle grazing. The chief market was Parántij with a population of 8631 souls. Many villages in Parántij, and a few in Modása, were of well built comfortable houses. The population, 44,755 strong, or 157 to the square mile, had neither the skill nor the means of the Kanbis of the central districts. In spite of the great increase in population, the spread of tillage and houses, and the marked rise in produce prices, the survey officer was not inclined to suggest an increase in the rates. Much land was still waste and the people were poor, showing little progress in irrigation or in the growth of rich crops. The former rates had worked well, and any great change in them would be likely to cause hardship. The question, how far varieties in assessment based on the caste of the cultivator should be continued, was one of much difficulty. The survey officer was of opinion that the wilder classes should be charged specially easy rates. With this view Government agreed, and besides large deductions on account of distance from markets, special indulgence was shewn to the less settled Kolis.[1]

The following statement contrasts the former rates with those introduced at the time of the last settlement:

Ahmedabad Survey Details, Old and New (1853-1863) Rates.

Sub-division.	Dry Crop.				Garden.				Rice.			
	Highest.		Lowest.		Highest.		Lowest.		Highest.		Lowest.	
	Old rates.	New rates.	Old rates.	New rates.	Old rates.	New rates.	Old rates.	New rates.	Old rates.	New rates.	Old rates.	New rates.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	A. p.	Rs. a. p.	Rs. a.	Rs. a. p.	Rs. a.	Rs. a. p.	Rs. a.	Rs. a. p.	Rs. a. p
Dholka ...	19 0 3	2 6 0	0 11 10	3 0	34 13 7	11 0	3 3 0	5 6	17 6 9	8 6	1 9 6	0 12 0
Dhandhuka.	4 15 11	4 0 0	1 12 11	3 6	25 2 2	8 8	1 11 2	2 0	...	3 3	...	2 10 6
Viramgám .	3 3 0	2 0 0	0 6 9	4 0	6 6 1	...	1 2 8	...	7 3 7	6 7	1 4 5	0 11 6
Gogha ...	1 4 5	1 15 6	0 10 2	5 0	4 4 0	4 12	3 6 5	3 0	...	...	...	...
Jetalpur ...	10 5 0	3 0 0	0 6 9	2 6	42 11 10	14 5	2 5 5	1 8	15 13 4	9 3	1 4 5	0 8 6
Parántij ...	3 6 5	2 8 0	0 10 2	2 0	4 12 6	6 8	1 7 9	1 2	3 6 5	4 4	0 13 7	0 12 6
Daskroi ...	7 3 10	9 13 6	0 6 9	5 0	26 14 5	14 14	1 1 0	1 6	14 15 9	13 2	1 7 9	1 4 0

The financial result of the survey was, as shown in the following tabular statement, a decrease, over the whole district, of 19·75 per cent in the Government demand:

Survey Financial Statement, 1853-1860.

Sub-division.	Year of settlement.	Ten years' average collections.	Collections of the year before settlement.	Year of Settlement.				Decrease per cent.
				Old System.		Survey System.		
				Total collections.	Rate per acre.	Total collections.	Rate per acre.	
		Rs.	Rs.	Rs.	Rs. a. p.	Rs.	Rs. a. p.	
Dholka	1853-54 ...	2,02,159	1,90,716	2,13,389	3 15 9	1,33,689	1 11 7	37·25
Dhandhuka ...	1856-57 ...	30,982	37,393	46,241	1 3 6	32,578	1 3 6	29 50
Viramgám ...	1857-58 ...	99,480	1,03,635	1,12,658	1 6 9	89,749	1 2 0	20 25
Gogha	1858-59 ...	2377	2211	2223	1 2 11	1959	1 0 9	11·75
Jetalpur ...	1858-59 ...	1,53.344	1,59,322	1,56,384	4 12 3	1,26,789	3 11 5	17·
Parántij	1860-61 ...	69,850	74,020	80,564	1 3 1	78,517	1 2 7	2·50
Daskroi	1860-61 ...	1,74,142	1,85,046	2,00,969	3 0 6	1,85,225	2 11 5	7·75
	Total ...	7,32,334	7,52,343	8,12,428	2 6 6	6,51,506	1 13 3	19·75

[1] Bom. Gov. Rev. Rec. 91 A of 1861, 67-97.

SECTION III.—TA'LUKDA'RS.[1]

Since 1863 the survey has been extended to the proprietary villages, numbering 372, including an area of 1988 square miles or more than one-half of the district, and yielding an estimated yearly revenue of over £100,000. The following statement gives their chief survey details:

Ahmedabad Proprietary Villages, 1877.

SUB-DIVISION.	Villages.	Principal proprietors.	Land.		Total estimated revenue.	Government tax.	Proprietor's income.
			Acres.	Assessment.			
				£.	£.	£.	£.
Viramgám	83	72	165,517	14,859	9989	3454	6535
Sánand	35	43	38,957	16,529	9909	3648	6261
Dholka	54	33	240,991	28,131	23,814	10,132	13,682
Dhandhuka ...	144	198	652,787	35,739	48,376	16,047	32,328
Gogha	56	80	118,542	7866	10,142	2382	7759
Total ...	372	426	1,266,794	103,124	102,230	35,663	66,565

The owners of these proprietary villages belong to three chief classes; Rajputs, called *Girásiás* or grantees,[2] *Gámetis*, or village owners, and *Bhumiás*, sons of the soil; Musalmáns, called *Kasbátis*, or townsmen; and Kolis, called *Thákardás*, or lordlings. The estates of these large landholders lie along the west of Ahmedabad, the border land between Gujarát proper and the peninsula of Káthiáwár. Along this line, it may be somewhat roughly said, that the estates of the Rajput landholders lie in the south, those of the Musalmáns in the middle, and those of the Kolis in the north. Most of the Rajput proprietors, of whose 221 villages, ninety-four are in Dhandhuka, fifty-four in Gogha, thirty-five in Dholka, thirty-four in Sánand, and four in Viramgám, represent old Rajput houses that still hold a remnant of their lands saved from Musalmán and Marátha conquerors. In Gogha, fifty-four of its sixty villages are (1878) held by Gohels who came into western Gujarát towards the close of the thirteenth century.[3] In Dhandhuka, of its 147 villages, forty-eight are held by Chudásmás, the descendants of the old Hindu dynasty of Junágad, and forty-four by Jhálás, akin to Vághelás and first known as Makvánás. In Dholka, of its 119 villages, thirty-three are held by Vághelás, a remnant of the Solanki race who fled from Anhilváda when (1297) that kingdom was destroyed by Alá-ud-din

1 Except where special references are given, this account of the Ahmedabad Tálukdárs is taken from Mr. Peile's Tálukdári Settlement Report. Bom. Gov. Sel. CVI.

2 Gámeti is the owner of the village; Girásia is a general term, used in the south-west Ahmedabad districts, to mean the owner of two or three villages. Mr. Williamson, May 1st, 1820; 17 of 1821, 147. In disturbed times some villages had placed themselves under the protection of chiefs, who, as Bhávnagar and Subdi in Gogha, and Koth in Dholka, called themselves Rájás. Bom. Gov. Sel. XXXIX. 51.

3 Forbes' Rás Mála, 237 (1878).

Chapter VIII.
Land Administration.
Tálukdárs.

Khilji. In Sánand, of its eighty-two villages, thirty-four are held by Vághelás. The four villages in Viramgám are held by Jhálás. Besides these, in Dholka, one village is held by Rávals, and one by Jhálás; in Dhandhuka, one by Rávals, one by Vághelás, four by Chárans, four by Gósáis, seventeen by Káthis, and seven by different classes, and in Gogha two by Bárots. The Káthis in Ránpur and western Dhandhuka are the descendants of Hindus from Cutch, who, about the fourteenth century, ousted the Chudásmás and Gohels. They are still a turbulent class with a bad name as landlords.

Musalmán proprietors hold in all forty-eight villages. Of these twenty-eight are held by Kasbátis, nineteen in Dholka, eight in Viramgám, and one in Sánand; and seventeen by Molesaláms, fifteen in Dhandhuka and two in Viramgám; besides these, three in Dhandhuka are entered simply as held by Musalmáns. The Kasbátis, or town as opposed to country proprietors, are of three classes, Khorásánis soldiers of fortune who came to Gujarát in the service of the Vághela dynasty of Anhilváda (1230-1300); a branch of Parmár Rajputs converted by Mahmud Begada about 1480; and Mena and Rahen soldiers from Delhi, who obtained lands in reward for service done to the Maráthás. The Molesaláms of Dhandhuka are Parmár Rajputs, of the same family and converted at the same time (1480), as the Dholka Kasbátis. Of the two Molesalám villages in Viramgám, and the three entered as Musalmán in Dhandhuka no details are given. In Chuvál, the north-east corner of Viramgám, Kolis or Thákardás, the offspring of Solankis and of Makvánás who intermarried with the Kolis of the Mahi Kántha, hold sixty-nine villages.

Under the loose government of the Maráthás, men of all these classes, Rajputs, Musalmáns, and Kolis, held as almost independent proprietors, their land-tax or tribute varying according to the power of the Marátha Government to enforce their demands. Under the British Government an inquiry showed that the rights of the different classes differed greatly, and from time to time considerable changes have been made in their position and management. The proprietary rights of the Rajput landowners of the southern sub-divisions were from the first admitted,[1] and, except when they failed to pay their land-tax, the management of their villages was not interfered with. The Chuvália Koli chiefs, after their rising and defeat at Lohar in 1819, had accountants placed on their villages, and, except an allowance of twenty-five per cent, had to pay their revenues to Government.[2] The Kasbátis of Dholka were from the first considered to be farmers of the revenue, and in 1817 the management

[1] In 1804 Col. Walker and Mr. Diggle considered the larger chiefs nearly independent tributaries. Bom. Gov. Sel. XXXIX. 14, 21, 31. They held that the smaller Girásiás and Kolis had a proprietary right in the soil derived from the remotest antiquity secured to them by universal assent and unimpaired in its privileges. Bom. Gov. Sel. XXXIX. 23. In 1814 Mr. Rowles spoke of the Dhandhuka and Gogha Gámetis as proprietors. Bom. Gov. Rev. Rec. 102 of 1815, 2272, 2276, 23rd November 1814. In 1820 Mr. Dunlop held that the landlords of Dhandhuka and Gogha were proprietors. Bom. Gov. Rev. Rec. 17 of 1821, 9, 23rd November 1820.

[2] East India Papers, III. 677. Before 1819 they had been in much the same position as the Dhandhuka and Gogha Girásiás. Bom. Gov. Rev. Rec. 17 of 1821, 37, 39.

of their villages was taken over by Government.[1] In 1821 these distinctions were done away. Mr. Elphinstone raised all classes to the position of proprietors, withdrew village accountants, reduced the land tax to two-thirds of the landlord's share, and granted leases for a term of years. A few years later (1829), the indebtedness and misery of Bápu Mia, the chief Kasbáti, again brought the matter to the notice of Government. It was then decided that his position was different from that of the Rajput landholders, and that his lands were held by sufferance of Government and were resumable at its will. But again, in the following year, Sir John Malcolm would seem to have been inclined to hold that though the Kasbáti's original claim to rank as a proprietor was doubtful, his long possession gave him a right to the position of landlord.[2]

During the next thirty years the Tálukdárs' rental was left almost unchanged, and, except when they failed to pay the tax, their villages were left entirely in their own management. At the same time the practice of granting leases for short terms of years was continued. It became usual in these leases to embody stipulations with the Girásiás, and the original simple agreement was gradually expanded into a formidable instrument which a Girásia could not execute without signing away many of his rights. Meanwhile the fall in grain prices and their careless and extravagant habits had plunged the Girásiás deep in debt. Of the kind of obligation incurred by signing bonds on stamped paper they had no experience. A few sharp visitations of the civil process intimidated them into needless pliability. When summoned to the courts, they either ignored the summons to their own discomfiture, or compromised matters with their creditors at a monstrous sacrifice. Money-lenders collected and became the terror of the district. Bond was heaped upon bond until the original transactions were lost in a maze of chicanery. Then came the recklessness of men who knew nothing of their own affairs except that they were inextricably involved.[3]

---

1 The Dholka Girásia villages would seem to have been treated in the same way as the Kasbáti villages, and *talátis* were introduced into all of them. East India Papers, III. 682 Mr. Dunlop (1820) seems to have thought that in Dholka, though the village holders were proprietors, the rights of the estate holders were essentially different from those of the holders in the south. Bom. Gov. Rev. Rec. 17 of 1821, 3, 23rd November 1820. Of the Kasbátis, Colonel Walker wrote; 'under the Márathás they were the restorers of villages who had been granted a lease for a term of years. They had increased their estates by taking lands in mortgage or as security for debts. The Dholka Kasbátis arrogated a power, like that the Girásiás possessed by inheritance, of settling the payment, or *jama*, on the villages under their management.' Bom. Gov. Sel. XXXIX. 13, 38, 39. In 1820 Mr. Dunlop held that Kasbátis had no proprietary right and had gained their lands by sale, mortgage, and other means. Bom. Gov. Rev. Rec. 17 of 1821, 7, 23rd November 1820.

2 Bom. Gov. Litho. Papers, 149, 43.

3 Bom. Gov. Sel. CVI. 14. From the first the indebtedness of the large landlord classes would seem to have been a cause of trouble. In 1820 the Girásiás were a large respectable body, but wanting in zeal, and with small means. Most were indebted and some in a state of total dependence. Bom. Gov. Rev. Rec. 17 of 1821, 148, 150. In 1823 the Dholka landlords were indolent, apathetic, and given to opium, with no idea of accounts, and generally in the hands of some hard and crafty Vánia. Bom.

Chapter VIII. — Land Administration. Tálukdárs.

When the revenue survey system was introduced into the district (1853) the question of the position of the large landholders pressed for settlement. The survey officers, accustomed to look with suspicion on the claims of all middlemen, and strengthened by the terms of the leases as well as by old Government resolutions denying to some Tálukdárs any proprietary rights, urged that the Girásiás were only hereditary leaseholders.[1] In this view they were supported by the opinion of the Government law officers who held that the provisions of the Tálukdárs leases were so stringent as to make them little better than Government tenants-at-will. From this moment all the peculiar rights of the Tálukdárs were in theory abolished. But in the quarters practically concerned, a different view was acted on. The creditors, hastening to close on the Girásiás, called on the civil courts to sell their lands. The courts held that the land might be sold, and whole fields and villages were put to auction and knocked down for a trifle to the creditors or their agents. If the landlords were leaseholders, the creditors' security was almost worthless and their position was desperate. If, on the other hand, the Tálukdárs were proprietors, their estates would be sold at nominal prices, and attempts of the buyers to take possession would probably end in a breach of the peace. Under these circumstances, an enactment (Act VI. of 1862) was framed, reciting the facts as to the leasehold, and providing for a settlement of liabilities and the re-investiture of proprietary rights. It left creditors no option in agreeing to an immediate and definite settlement. The method of making awards on the claims of creditors was fixed by rules appended to the Act. These rules were calculated to award the whole claim wherever it was fair and reasonable, and to cut off the excess from such as were extortionate. If the circumstances of the Tálukdár called for no abatement, or if the loans were secured on freehold and not on leasehold property, power was given to the Governor in Council to grant an award according to the terms of the deed or decree. That the grant of proprietary rights might be

---

Gov. Sel. XI. 43. In 1825 the Viramgám landlords were all deep in debt. Bom. Gov. Sel. X. 57. In 1830 from their careless unthrift they were deeply involved and some of them sunk in absolute poverty. Gov. Litho. Papers, 149, 43. Of the Kasbátis the state was worse. In 1818 Bápu Mia, the chief of the Dholka Kasbátis, was in money difficulties and his estate under attachment. Hoping that he would do better, the Collector freed his estate from attachment and placed Bápu in charge. But he was idle and profligate, and to raise money transferred the management to an Ahmedabad banker. His debts were estimated at £15,000 (Rs. 1,50,000) and his yearly income at £2000 (Rs. 20,000). Bom. Gov. Rev. Rec. 117 of 1825, 51, 61. He is said to have wished, on receipt of a pension, to resign the management of his estate. Bom. Gov. Sel. CVI. 43. In 1825 he had to live in Cambay for fear of being arrested. In 1830 his estate was attached and himself so poor, that Sir John Malcolm granted him a money allowance. Litho. Papers, 149, 43, 15th October 1830. The state of the Viramgám Kasbátis was little better. They were (1825) deeply in debt, their villages wretchedly mismanaged. Gov. Sel. X. 57. In 1827 the Chuvál Koli chiefs were involved in debt, much annoyed by suits brought against them in the civil courts. Bom. Gov. Sel. X. 78.

[1] A much-quoted authority was, "Like the renter of a farm the Tálukdár has no right to continued possession.' Gov. to Collector, Sept. 30, 1829. But this was written only of the Dholka Kasbátis. Bom. Gov. Sel. CVI. 43. The officers of the 1820-1826 survey defined tálukdár villages as villages held on an hereditary lease. Bom. Gov. Sel. X. 19, 1. In 1854 Tálukdárs are spoken of as hereditary leaseholders, a compromise between proprietors and revenue farmers. Bom. Gov. Rev. Rec. 52 of 1856, 406.

extended to as large a class as possible, Government decided that holders of estates not in want of relief should, if they accepted the new settlement, be declared proprietors. And, to protect this body of proprietors, it was decided that, for arrears of land tax, portions of their estates should be sold only as a last resource, and that all sales should be conducted by the Collector who, if possible, should stay the sale and satisfy the decrees by other means. The Kasbátis were among the landlords to whom the provisions of the Act were extended. At the same time an inquiry into the origin of their claims showed that in most cases their lands were originally mortgaged or sold to them as managers or farmers. Accordingly, only a small number of their villages have been continued to the Kasbátis. Of fifty-six, the total number of Kasbáti villages in Ahmedabad and Kaira at the beginning of British rule, twenty-two have been resumed, five are managed by Government, nine are held under a contract that allows the Kasbátis twenty per cent of the receipts, in twelve the Kasbáti is a superior holder under survey rates, and in eight the right of levying twice the survey rates has been conceded.

The steps taken to settle the landlords' debts were, the survey and assessment of their estates, the fixing the land-tax, and the advance of money to help in meeting their liabilities. The field work of the survey was carried out between January 1863 and March 1866 at a cost of less than one anna the acre. The new settlements, partly introduced in 1864-65, were completed in 1865-66.[1] The amount of the land-tax was fixed at from fifty to seventy per cent of the survey rates, and, for an improvement fund to be spent on works and schools, a further charge of 6¼ per cent of the land-tax was levied. An agreement was drawn up, stating that the landlord was responsible for the payment of the land-tax and cess, and explaining his duties connected with the village police. The sum advanced by Government amounted altogether to £55,000 (Rs. 5,50,000). The result of the inquiry into the landlords' indebtedness was, out of total claims amounting to £270,519 (Rs. 27,05,190), the award of £136,040 (Rs. 13,60,400). The burden of these liabilities was greatly lightened by the more than fourfold rise of produce prices in 1863 and 1864.[2] And such rapid progress was made that on the 1st June 1865, £66,780 (Rs. 6,67,800), or more than one-half of the whole indebtedness, had been cleared off. Since 1865 the fall in produce prices has delayed the final settlement. But steady progress has been made, and, at the close of 1876, £128,963 (Rs. 12,89,630) or 94·79 per cent of the whole had been cleared off, and of the £55,000 (Rs. 5,50,000) advanced by Government only £13,647 (Rs. 1,36,470) were outstanding.[3]

---

1 Much of this land had not before been surveyed. Todar Mal's (1590) survey included only Dholka. The 1820-1826 survey laid down the boundaries of the Dholka and Viramgám estates. But, except a few under attachment, the Dhandhuka and Gogha estates had never been surveyed. A distinct survey of each estate was made, and the land parcelled into blocks averaging about forty acres. Bom. Gov. Sel. CVI. 28.

2 Cotton rose in price from Rs. 1¼ to Rs. 6 a *man*. Bom. Gov. Sel. CVI. 19.

3 Mr. King, C. S., Tál. Set. Officer, 6th October 1877.

Chapter VIII.
Land Administration.
Tálukdárs.

A Tálukdár's or landlord's estate is held either by an individual or by a family. Only seven estates, each forming the domain of a chiefship or *gádi*, are held by single landlords. The rest are the property of different members of the chief family, *bháyád*. A village given by a chief to a younger son reverts to the chief if the younger son dies childless. But if he has five sons, the village is divided at his death into five parts, his eldest son having, with the Jhálás a double share, and with the Vághelás and Chudásmás 1½ shares. The Káthis divide equally, and with them females also inherit. The Chuvál Thákardás have kept the whole estate in common, the strongest holding shares in the produce; the weaker amid perpetual quarrelling are put off with subsistence lands. Among them the sharers are so numerous and their influence so divided and uncertain, that, except perhaps at Bhankora, there is nowhere anything like a separate chiefship.

The chief of Katosan in the Mahi Kántha, and the chiefs of Limbdi, Wadhwán, Vánkáner, Vala, and Láthi, have estates in western Ahmedabad; so also had the Thákor of Bhávnagar till in 1864 his villages were transferred to Káthiáwár.

In a Tálukdár's village are the Tálukdár or Tálukdárs, commonly called the Darbár; the attendants commonly Rajputs of the Chohán, Ráthod, or Parmár clans; one or two shopkeepers with whom the Tálukdár has an account for petty supplies, and perhaps a Gosái or Cháran. Besides these there are the police headman, *mukhi*, appointed under the Collector's approval by the Tálukdár; the messenger, *haváldár*, who helps the headman and looks after the crops in the village grain-yard; the village barber, tracker, and others, and the cultivators, of whom a few are Kanbis and Kolis, and the rest cattle-dealers of the Bharvád, Ahir, and other castes. There are no hereditary village officers, and except in Dholka, the name of Patel is unknown. The Darbár is highly regarded, even in its eccentricities and follies, and no one holds any station in the village but by its pleasure. The summary jurisdiction of the eighteenth century has not been entirely forgotten. It is more than suspected that some of the chiefs have occasionally revived the feudal powers which the laws have superseded. With the view of giving them a personal interest in upholding the law, some of the best qualified among their number have lately been invested with magisterial powers.

Like the rest of the lands, the village site is the property of the Darbár, and when a tenant leaves a village, the wooden frame of his house is one of the chief's perquisites.

Except such as he or his ancestors may have given away, all village lands pay rent to the Tálukdár. Of alienated lands some part has been given absolutely to temples, Bráhmans, or Chárans; the rest, often paying a cess or quitrent, is enjoyed by the village servants as their wages. Of the chief's land a portion is generally a home farm, *gharkhed*, cultivated by the house servants. The rest is let to tenants, whose tenure is not secured by leases or written conditions, but is presumably renewed from year to year. Tenants sometimes pay a sum to secure a field, but this is irregular, and the money

probably goes into the manager's pocket. Except in a few instances, rents are everywhere paid in kind, the landlord dividing the produce according to the village custom, *dháro*. The share varies with different crops. In the case of wheat and other food grains, the common practice is to make an estimate of the standing crop by cutting and weighing a few rows at fixed intervals, and so getting an average, *dhál*. With cotton, the more favoured plan is to bring the produce to the village grain yard and divide it there, *mankhal*.

As its variations are countless, only a general idea of the customary, *dháro*, rent can be given. First, the cultivator is allowed for seed, in the case of wheat fifty pounds the acre, and in the case of gram twenty-five pounds; next, he gets grain equal to the pay of the extra labourers engaged for the harvest; and third, under the name of *partharo*, he is allowed about five per cent of the produce to cover the wear and tear of his stock. Under the name of *mápu* the landlord has a similar cess, from 2½ to five per cent of the produce, for interest on capital. Lastly, the village servants and temples have their small perquisites amounting to about five per cent of the produce. After these deductions, the produce is commonly divided between the landlord and the tenant in equal shares. In villages where the landlord takes less than half, he generally makes up by a plough tax, *sánthi vero*, varying from £1 to £2 (Rs. 10 - Rs. 20) a plough.

If the tenant raises garden produce, or even if he manures his field, he has the further advantage that the Tálukdár allows for his extra outlay by taking one-fourth, or even one-eighth of the produce, instead of half. The tenant has also the straw of the grain crop, the grass from the sides of his field, and in some villages from the meadows. If he takes up new ground he pays for three years either nothing or a quitrent.

Of the expenses the landlord pays the land tax, *jama*, the police headman's allowance, and provides land for the support of village servants. Together landlord and tenant pay for seed, extra labour, grain for village servants, and village charities. The tenant finds his own tools and cattle, generally receiving more for the wear and tear of his stock than the landlord does for any capital he may have sunk. In case of such a crop as sugarcane, the tenant has an allowance for all extra outlay, and a larger share of the produce.

Except the common grains kept for food, the crops are sold to travelling agents who visit the villages at harvest. The cost of removal falls on the buyer, but is duly considered in the price offered. The tenant is saved the trouble and anxiety of storing and selling more than his own share of the produce; he cannot be pressed for rent before the produce is realized, nor for a cash instalment before he has got his money from the buyer.

Under this system, though the cultivators are tenants-at-will, holding from year to year, they are not subject to excessive demands or liable to be turned out of their fields. The practice of sharing the produce keeps the rents at a fixed standard. The custom, or *dháro*, signed, both by landlord and tenant, forms part of the records of every village. Neither civil nor revenue courts would help a

Chapter VIII. Land Administration.

landlord to exact more than the custom allows, while the provision [1] of a six months' notice before the close of a tenancy guards against harsh and summary eviction. As a matter of fact, exactions are rarely attempted, and cases of eviction are almost unknown. So long as a tenant conforms to the custom, he is practically as safe as a cultivator in a Government village.[2] Some better system of water storage is the great want of these estates. At present they are almost entirely dependent on the local rainfall, and though in good years they yield large revenues, the utter barrenness of a bad season can, unless it has been seen, hardly be believed.

Parántij Kolis.

The arrangements, made in 1862, for freeing from indebtedness the western landowners, were not extended to the eastern Koli, or *mehvás*, chiefs. These chiefs, of whom there are sixty-five leading sharers, claim, like the Chuvál chiefs in Viramgám, a strain of Rajput blood, some of them bearing the names of Ráthod, Chohán, and Makván. Of their forty-one villages lying chiefly on the border of the sub-division, thirty-seven are in Parántij and four in Modása. Of the sixty-five chief proprietors four have two villages each, fourteen one village, and forty-seven have shares in nineteen villages.[3]

When, in 1818, they came under British management these chiefs were the most independent in the country.[4] But the fate of the Lohar Kolis had so good an effect on them, that they agreed at once to pay their land-tax, and two years later the amount was increased without the slightest opposition.[5] No accountants were appointed to their villages. In 1821, Mr. Elphinstone wrote; 'they have maintained their independence, and in some cases their rebellious and predatory spirit; they should be made responsible for the payment of the tribute and for the maintenance of public order, but no accountants should be sent to their villages; the amount of revenue should for long be considered secondary to the reform of their habits and the increase of their industry; except a slight rise in suitable cases, the tribute should be kept nearly stationary'.[6] Accordingly their lands were, in 1824, exempted from survey measurement and inquiry. At that time, though on the whole orderly, many of the villages bore a bad name for thieving, and the country was extremely wild with but little tillage. The chiefs were impoverished, paying on money advances about forty per cent interest. Their dependence and poverty were lamentable, and urgently called for remedy.[7] Since 1824 the position of the *mehvás* chiefs has been in no way changed. From year to year the Collector has continued to make rough settlements, fixing the land tax by what the chiefs were thought able to pay. In 1818 the amount of their contribution was £1407 (Rs. 14,070). It has since varied from £1765 (Rs. 17,650), its highest in 1821, to £869 (Rs. 8690), its

---

1 Act I. 1861. XLIII. 1, 2.
2 Bom. Gov. Sel. CVI. 27.
3 Survey Supt. 131, 6th February 1878, 12.
4 Bom. Gov. Rev. Rec. 141 of 1819, 2064.
5 Bom. Gov. Rev. Rec. 17 of 1821, 66.
6 East India Papers, III. 674-684.
7 Bom. Gov. Sel. X. 19, 43-46.

lowest in 1833. For the last ten years the changes have been very slight, the highest sum being £1356 (Rs. 13,560) in 1869, and the lowest £1071 (Rs. 10,710) in 1875-76. During all this time the management of these villages has been left entirely to the chiefs, and neither in 1861 when the revenue survey was introduced into the rest of Parántij, nor in 1863 when special measures were taken for the relief of the western landlords, was any change made in the state of the eastern villages. Compared with the detailed knowledge of the rest of the district, the unsatisfactory nature of these chance yearly settlements, had, for some years, made the Collector anxious to have the Koli villages surveyed and some certainty introduced into the proportion of their revenues taken by Government. Accordingly in 1873 the survey of these villages was sanctioned.[1] The objects of the survey were to ascertain the state of the villages, to find out how much of the land was alienated, and having found their revenue-yielding powers, to fix a fair land-tax. The survey showed that of 65,033 acres of culturable land, 55,583 or 85·46 per cent were under tillage; that, to each square mile, there were 223 souls, fifty-six houses, one well, five carts, thirty-seven ploughs, eighty-six oxen, and 184 milch cattle, figures which in every way compared favourably with the state of the Government villages of Parántij in 1860, the year of their last survey. In spite of the great spread of tillage, the increase of wealth, and the almost nominal demands of the State, the condition of the chiefs would seem in the last fifty years to have little if at all improved. All of them are in very straitened circumstances, many towards the close of the season having barely the means of subsistence.[2] All are more or less deeply involved, their debts varying from £100 to £3000 (Rs. 1000 - Rs. 30,000). Meanwhile their managers, in many cases also their money-lenders, enjoying all the income, drive in fine carriages and build magnificent houses. The result of the survey was to show that the revenue of the states was very much greater than had before been supposed. In 1870 according to the statements made by the chiefs to the Collector their total revenue was £1998 (Rs. 19,980). But on the basis of the survey rates sanctioned in 1861 for other Parántij villages, the revenue was found to be, allowing for deductions on account of alienations, £5033 (Rs. 50,330). On the proportion, fifty to seventy per cent of the survey revenue, sanctioned in 1863 as the amount of land-tax to be recovered from the landlords of western Gujarát, the Government contributions might be raised to from £2408 to £3371 (Rs. 24,080 - Rs. 33,710). Even the lower figure shews an increase over the present demand of £1450 (Rs. 14,500) or 123½ per cent.

Season Reports, 1862-1877.

The following is a summary of the chief available facts regarding the state of the district during the last sixteen years:

In 1862, the rainfall of twenty-eight inches was plentiful and on the whole seasonable. The crops were excellent and public health was good. The land revenue rose from £138,511 to £144,924 (Rs. 13,85,110-Rs. 14,49,240); £205 (Rs. 2050) were remitted, and

[1] Gov. Res. 3276, 9th June 1873.
[2] Survey Superintendent 131, 6th February 1878, 44.

Chapter VIII.
Land Administration.
Season Reports, 1862-1877.

£610 (Rs. 6100) left outstanding. Indian millet, *juvár*, rupee prices rose from forty-two to twenty-eight pounds.

In 1863, the rainfall of twenty-eight inches was plentiful but too soon over. Rice suffered, and, though most of it was saved by watering, the harvest was about a fourth less than in the year before. Public health was good. The land revenue, chiefly from the introduction of revised rates, rose from £144,924 to £157,733 (Rs. 14,49,240 - Rs. 15,77,330); £76 (Rs. 760) were remitted, and £1899 (Rs. 18,990) left outstanding. Indian millet rupee prices rose from twenty-eight to twenty-two pounds.

In 1864, the rainfall of nineteen inches was scanty, the failure of the late rains reducing the harvest to about forty per cent below the average. The land revenue fell from £157,733 to £150,409 (Rs. 15,77,330 - Rs. 15,04,090); £84 (Rs. 840) were remitted, and £1069 (Rs. 10,690) left outstanding. Indian millet rupee prices rose from twenty-two to fifteen pounds.

In 1865, the rainfall of twenty-six inches though late was plentiful, and except rice the crops were good. There were rather widespread outbreaks of cholera and fever. The land revenue fell from £150,409 to £145,822 (Rs. 15,04,090 - Rs. 14,58,220); £2 (Rs. 20) were remitted, and £189 (Rs. 1890) left outstanding. Indian millet rupee prices fell from fifteen to twenty-six pounds.

In 1866, the rainfall of twenty six inches was sufficient but untimely, too heavy in August and rather soon over. Some of the crops suffered. There was much fever, and in Daskroi a disease called *bhumria* carried off many buffaloes. The land revenue rose from £145,822 to £146,940 (Rs. 14,58,220 - Rs. 14,69,400); £317 (Rs. 3170) were remitted, and £697 (Rs. 6970) left outstanding. Indian millet rupee prices fell from twenty-six to thirty-four pounds.

In 1867, the rainfall of seventeen inches was scanty and ill-timed, too late of beginning and too heavy at the end. Rice, cotton, millet, and grass suffered. Public health both of man and beast was good. The land revenue rose from £146,940 to £150,734 (Rs. 14,69,400 - Rs. 15,07,340); £212 (Rs. 2120) were remitted, and £41 (Rs. 410) left outstanding. Indian millet rupee prices rose from thirty-four to thirty pounds.

In 1868, the rainfall of forty-six inches though abundant was ill-timed, scanty at first, then too much, and again too soon over. The crop suffered much. Public health was on the whole good. The land revenue rose from £150,734 to £151,454 (Rs. 15,07,340 - Rs. 15,14,540); £1231 (Rs. 12,310) were remitted, and £449 (Rs. 4490) left outstanding. Indian millet rupee prices fell from thirty to thirty-two pounds.

In 1869, the rainfall of thirty-four inches was sufficient and though at first scanty was in the end well-timed. Except that millet suffered much from locusts and that grass was at first very scarce, the crops were good. There was much cholera and fever, and in Daskroi some 3000 head of cattle died from eating leaves instead of grass. The land revenue fell from £151,454 to £148,374 (Rs. 15,14,540 -

Season Reports, 1862-1877.

Rs. 14,83,740); £91 (Rs. 910) were remitted, and £324 (Rs. 3240) left outstanding. Indian millet rupee prices rose from thirty-two to nineteen pounds.

In 1870, the rainfall of twenty-eight inches was sufficient and well-timed. Except some damage by locusts, the crops were good. Cholera and fever were rather prevalent. The land revenue fell from £148,374 to £147,166 (Rs. 14,83,740 - Rs. 14,71,660); £113 (Rs. 1130) were remitted, and £636 (Rs. 6360) left outstanding. Indian millet rupee prices rose from nineteen to eighteen pounds.

In 1871, the rainfall of thirty-three inches though sufficient was ill-timed, too much about the middle and too soon over. The crops especially rice suffered. Except for fever public health was good. The land revenue rose from £147,166 to £147,378 (Rs. 14,71,660 - Rs. 14,73,780); £184 (Rs. 1840) were remitted, and £518 (Rs. 5180) left outstanding. Indian millet rupee prices fell from eighteen to twenty-eight pounds.

In 1872, the rainfall of forty-eight inches was abundant and well-timed, and the crops, except some injured by frost, were excellent. Fever was common but public health was on the whole good. The land revenue fell from £147,378 to £147,169 (Rs. 14,73,780 - Rs. 14,71,690); £517 (Rs. 5170) were remitted, and £242 (Rs. 2420) left outstanding. Indian millet rupee prices fell from twenty-eight to thirty-two pounds.

In 1873, the rainfall of twenty-three inches was short, but, except that it began rather late and stopped too soon, was well-timed. The early harvests were large, the late rather short. Public health was good. The land revenue fell from £147,169 to £145,777 (Rs. 14,71,690 - Rs. 14,57,770); £129 (Rs. 1290) were remitted, and £334 (Rs. 3340) left outstanding. Indian millet rupee prices fell from thirty-two to forty pounds.

In 1874, the rainfall of forty inches was sufficient, and, though a little late of beginning, was well-timed. The harvest and public health were good. The land revenue fell from £145,777 to £144,180 (Rs. 14,57,770 - Rs. 14,41,800); £420 (Rs. 4200) were remitted, and £235 (Rs. 2350) left outstanding. Indian millet rupee prices remained steady at forty-two pounds.

In 1875, the rainfall of twenty-three inches was rather short and ill-timed, floods in September doing much damage. Rice suffered but other crops were fair. Except for an outbreak of cholera public health was good. The land revenue fell from £144,180 to £142,121 (Rs. 14,41,800 - Rs. 14,21,210); £2295 (Rs. 22,950) were remitted, and £35 (Rs. 350) left outstanding. Indian millet rupee prices fell from forty-two to forty-eight pounds.

In 1876, the rainfall of twenty-two inches was short, but on the whole well-timed. The crops were good. There was a rather severe outbreak of cholera. The land revenue rose from £142,121 to £142,683 (Rs. 14,21,210 - Rs. 14,26,830); £400 (Rs. 4000) were remitted, and £71 (Rs. 710) left outstanding. Indian millet rupee prices fell from forty-eight to fifty pounds.

Chapter VIII.
Land Administration.

Season Reports, 1862-1877.

In 1877, the rainfall of twenty-one inches was short and ill-timed. The crops suffered considerably and fodder was very scarce. Public health was on the whole good. The land revenue rose from £142,683 to £143,040 (Rs. 14,26,830-Rs. 14,30,400); £205 (Rs. 2050) were remitted, and £414 (Rs. 4140) left outstanding. Indian millet rupee prices, on account of the famine in the Deccan, rose from fifty to thirty-two pounds.

Development, 1846-1876.

During the thirty years ending 1876, population has increased from 590,757 to 829,637 or 40·44 per cent; houses from 212,464 to 260,970 or 22·83 per cent; ploughs from 59,630 to 63,707 or 6·83 per cent; carts from 18,401 to 22,012 or 19·62 per cent; while the number of cattle decreased from 505,285 to 466,229 or 7·72 per cent. In these years the land revenue has risen from £118,708 to £142,683 or 20·19 per cent. Eight municipalities, four dispensaries, and 175 sclools have been established, and 373 miles of road and ninety-three miles of rail have been opened.

CHAPTER IX.

JUSTICE.

WHEN, in 1802, the districts north of the Mahi were ceded to the British, justice was not administered according to any written law but according to the will of the local authority. This in the unsettled districts was the chief and in the quiet villages the manager or revenue farmer. In the unsettled territories, though the power of life and death was in their hands, the chiefs seldom punished crimes against the person; the offender was left to suffer at the hands of the injured man's relations. Under this arrangement one murder led to another, the avenger receiving praise rather than blame. 'The life of a man was taken with the same indifference as the life of a beast.'[1] At the same time the local custom set one important check on vengeance. Any run-away Girásia criminal who threw himself at the feet of another Girásia and asked for shelter was sure to find it. His guardian would refuse to give him up till those who sought vengeance made a solemn promise to treat him with kindness. When the friends of the slain man agreed to drink opium-water, *kasumba*, from the murderer's hands the blood feud was at an end. In quiet villages the manager, besides his want of power to inflict capital punishment, was restrained by common feeling and custom. But in spite of this safeguard, his efforts to make the greatest possible revenue out of crimes, caused the widest injustice and misery. No case was inquired into that did not offer the hope of gain, and any guilt, however heinous, could be cleared by a money payment. To prove a person guilty, the cruelest measures were taken. To make him confess, the accused was set in the sun with a large stone on his head, or he was beaten, or his fingers rolled in cotton were dipped in oil and set on fire. If he proved not to be guilty, to make up for his sufferings the tortured man had a turban given him or some small money present. The whole was done without method, and except an entry of the amount of the fine no record of any case was kept. Besides paying a fine the offender was bound to give security for his future good conduct. Of these securities there were six, *fail* or *chálu zámin* for good behaviour; *házar zámin* for personal appearance; *lila*, green, that is lasting security for good behaviour; *ádzámin*, a cross that is counter or additional surety; and *ut kant Ishvar Mahádev*, a solemn, and unusual engagement.[2]

In unsettled villages civil disputes were either decided by the chief, or settled by arbitration or by the influence of a Bhát security. In forming his opinion the chief was guided by no rule and generally settled the question in favour of the party who paid him most. In arbitration cases, but these among the warlike tribes were not

[1] Bom. Gov. Sel. XXXIX., I. 32.

[2] Bom. Gov. Sel. XXXIX., I. 36.

Chapter IX.
Justice.
1803.

common, the chief kept a small sum and spent it on charity. Money disputes were settled by the help of a Bhát or Cháran security. The debtor in all cases had to name a surety. If he did not pay, the surety would sit starving at the debtor's door, and if this failed would wound himself or kill his wife or child. But the debtor was seldom stubborn enough to let things reach this pass. In the peaceful villages civil disputes were generally settled by arbitration, the manager always recovering from the successful party one-fourth part of the amount awarded.

The judicial administration of the lands acquired in 1802 remained in the hands of the Resident at Baroda, till in 1805 a Judge and Magistrate was appointed for Kaira. The Resident and his officers administered the police and justice of the country according to equity and local usages. In 1805 the British Regulations and system of justice were introduced. In consequence of the acquisition of fresh territory, a separate Judge was appointed for the Ahmedabad district on 1st January 1818 and the western districts were transferred from Kaira to his charge. In 1828 the office of Judge of Kaira was abolished, and since that time the Kaira district has been under the jurisdiction of the District Judge of Ahmedabad.[1]

Judicial Staff,
1830 1878.

Of the strength of the staff appointed to decide civil cases in the Ahmedabad district no details have been obtained earlier than the year 1830. In that year the district was furnished with fourteen judges. The total number of suits disposed of was 7677. Twenty years later in 1850 there were in all twelve courts and the cases disposed of numbered 11,636. In 1860 there were thirteen courts and the suits numbered 3706. In 1870 the number of courts was reduced to seven, while the number of decisions rose to 5065. In 1874 there were six courts and 5851 decisions. In 1877 the number of courts was the same while the total of suits fell to 5843. At present (1878) the district is provided with a judge and an assistant judge each with jurisdiction over the Ahmedabad and Kaira districts; and four subordinate judges with an average jurisdiction over 963 square miles and 207,409 souls. Of the sub-judges, one stationed at Ahmedabad has jurisdiction over Daskroi and some villages of Sánand, Parántij, and Modása; another at Dholka has jurisdiction over Dholka and some villages of Sánand; a third at Viramgám has jurisdiction over Viramgám and some villages of Sánand; and a fourth at Dhandhuka has jurisdiction over Dhandhuka, and Gogha which he visits twice a year in March and November. Besides these there is a small cause court at Ahmedabad.

Civil Statistics.

The average distance of the Ahmedabad court from its six furthest villages is forty-four miles; of the Dholka court, twenty-two; of the Viramgám court, thirty-two, and of the Dhandhuka court, thirty-eight.

Exclusive of suits settled by the small cause court, the average number of cases decided during the eight years ending 1877 is 5854. During the first four of those years the total rose from 5065

[1] In 1856 a Senior Assistant Judge was appointed for Kaira. This appointment was abolished in 1869, Bom. Gazetteer, III. 116.

in 1870 to 6167 in 1873 and then fell to 5843 in 1877. Of the total number of cases decided during the eight years ending 1877, 58·61 per cent have on an average been given against the defendant in his absence. The proportion of cases decided in this way would seem to have varied but little, the percentages being 58·2 in 1870, 60·2 in 1871, 60·3 in 1876 and 54·4 in 1877. Of contested cases only 16·97 per cent have, during this period of eight years, been on an average decided for the defendant. The proportion of such cases decided in favour of the defendant fell from 26 per cent in 1870 to 14 per cent in 1877. In 161 or 2·75 per cent of the whole number of suits decided in 1877 the decree has been executed by putting the plaintiff in the possession of the immovable property claimed. The number of cases of this kind rose from eighty-four out of 5065 in 1870 to 230 out of 6167 in 1873, and then during the next four years fell to 161 out of 5840 in 1877. In 33·57 per cent of the decisions passed in 1877, decrees for money due have been executed by the attachment or sale of property; of these 5·80 per cent have, on an average, been by the sale of movable and 27·77 per cent by the sale of immovable property. Compared with 1870, the 1877 returns of attachments or sales of movable and immovable property show a rise from 245 to 339 in the former and from 896 to 1623 in the latter.

Ahmedabad Ex-parte Decrees, 1870-1877.

Year.	Suits.	Decreed Ex parte.	Percentage.
1870	5065	2951	58·26
1871	6095	3670	60·21
1872	6088	3586	58·90
1873	6167	3632	58·89
1874	5851	3418	58·41
1875	5829	3451	59·20
1876	5893	3558	60 37
1877	5843	3182	54·46
Total ...	46,831	27,448	58·61

Debtors.

Compared with 1870 the number of decrees executed by the arrest of the debtor during the eight years ending 1877 has considerably fallen, the total for 1870 being 497 against 61 in 1877. As will be seen from the following table, the number of civil prisoners has varied little during the eight years ending 1877, the total in the latest year being 112 compared with 127 in 1870, and 138 in 1871 and 1876.

Ahmedabad Civil Prisoners, 1870-1877.

Year.	Prisoners	Days.	Releases.				
			By satisfying the decree.	At creditor's request	sub-sistence allowance.	Disclosure of property.	Time expiry.
1870	127	8	17	38	66	4	2
1871	138	8	16	25	87	9	1
1872	125	7	14	26	79	6	...
1873	133	10	12	38	73	9	1
1874	109	6	2	29	71	2	5
1875	121	8	11	32	73	4	(a) 1
1876	138	10	8	49	79	2	.
1877	112	7	18	23	66	3	2

(a) Escaped.

Chapter IX.

Justice.

Civil Courts, 1870-1877.

Of the 112 prisoners in 1877, 101 were Hindús and 11 Musalmáns.

The following statement shows in tabular form the working of the District Civil Courts during the eight years ending 1877:

Ahmedabad Civil Courts, 1870-1871.

Year.	Suits disposed of.	Average value.	Uncontested.					Contested.				Execution of Decrees.			
			Decreed ex-parte.	Dismissed ex-parte.	Decreed on confession.	Otherwise disposed of.	Total.	Judgment for plaintiff.	Judgment for defendant.	Mixed.	Total.	Arrest of debtor.	Decree-holder put in possession of immovable property.	Attachment or sale of property. Immovable.	Attachment or sale of property. Movable.
		£. s. d.													
1870 ...	5065	17 19 0	2951	161	113	1160	4385	426	180	74	680	497	84	896	245
1871 ...	6095	11 3 0	3670	188	143	1400	5401	507	126	61	694	522	110	1036	253
1872 ...	6088	11 3 3	3586	234	138	1448	5406	529	85	68	682	425	187	1113	246
1873 ...	6167	12 0 9	3632	30	205	1587	5454	518	104	91	713	81	230	2154	488
1874 ...	5851	11 1 7	3418	18	159	1702	5297	421	65	68	554	45	221	1714	383
1875 ...	5829	10 8 2	3451	8	139	1715	5313	371	89	56	516	55	180	1661	310
1876 ...	5893	11 11 0	3558	8	142	1712	5420	329	97	47	473	104	193	1609	376
1877 ...	5840	13 5 0	3182	39	174	1803	5198	470	95	77	642	61	161	1623	339

Small Cause Court.

From the following table it will be seen that during the eight years ending 1877 the total number of suits decided by the Ahmedabad Small Cause Court, which rose from 3680 in 1870 to 4760 in 1872 has fallen to 2540 in 1877, or a decrease of 30·97 per cent in eight years. During this period of eight years the average value of suits has ranged between £5 1*s.* 6*d.* (Rs. 50-12-0) in 1873 and £6 1*s.* (Rs. 60-8-0) in 1877. As regards the execution of decrees, attachments of property have risen from 261 in 1870 to 383 in 1877 with the highest total of 728 in 1873; and sales from eighty to 126 with the highest total 158 in 1873. The number of debtors imprisoned was 55 in 1877, compared with 51 in 1870 and 68 in 1875.

Ahmedabad Small Cause Court, 1870-1877.

Year.	Decisions.	Suits. Under £5.	Suits. From £5 to £20.	Suits. From £20 to £50.	Average amount.	Average cost.	Processes. Movable property attached.	Processes. Movable property sold.	Persons imprisoned.
					£. s. d.	£. s. d.			
1870 ...	3680	2375	1079	226	5 12 7	0 12 3	261	80	51
1871 ...	4204	2714	1237	253	5 13 8	0 11 7	493	119	56
1872 ...	4760	3253	1258	249	5 4 10	0 11 9	410	107	61
1873 ...	4606	3300	1079	227	5 1 6	0 11 4	728	158	67
1874 ...	3770	2594	986	190	5 7 8	0 13 10	351	110	41
1875 ...	4121	2904	966	251	5 13 5	0 11 3½	383	134	68
1876 ...	4193	3029	949	215	5 8 11	0 12 0	461	120	60
1877 ...	2540	1028	1286	226	6 1 0	0 12 11	383	126	55

Arbitration Court.

In November 1876, an association was formed at Ahmedabad, for the purpose of settling by arbitration, *lavád*, debt and other simple civil disputes. The members, altogether about fifty in number, are

Chapter IX. Justice.

merchants, bankers, Government pensioners, pleaders and newspaper editors. The business is managed by a committee of four, helped by a secretary, a pleader by profession. Two of the members attend in turn to dispose of business. Before a case is heard, the parties state in writing that they will be bound by the court's award. Pleaders, if the parties wish it, are allowed to appear. Except in intricate cases when two sit together, the award is generally passed by a single member; and unless the parties press for it, or the member who gave it wishes a review, the award is final. The members receive no pay. But to meet expenses, fees for serving summonses and for copies of awards are levied varying from 1½*d.* (1 *anna*) in suits of less than £2 10*s.* (Rs. 25) to 2*s.* (Re. 1) in suits for more than £300 (Rs. 3000). Unless they are filed in a civil court, these arbitration awards have no legal force. During the first year of working (Nov. 1876 - Nov. 1877), of 1376 suits filed, 235 were decided, 122 were withdrawn or compromised, and 1019 remained pending.

Registration.

There is registration enough to employ seven sub-registrars, of whom six are special, and the seventh, head clerk to the mámlatdár of Gogha, belongs to the ex-officio class of sub-registrars. They are distributed, one at each of the head-quarters of the district sub-divisions. In addition to the supervision exercised by the Collector, who is the district Registrar, and by his assistant or deputy, a special scrutiny is, under the control of the Inspector General of Registration and Stamps, carried on by the inspector of registration for Gujarát. The sub-registry office at Ahmedabad is one of the most important in the Bombay Presidency, yearly registrations ranging from 1500 to 2000. According to the registration report for 1877-78 the registration receipts for that year amounted to £1867 (Rs. 18,670) and the charges to £946 (Rs. 9460), leaving a balance of £921 (Rs. 9210). Of 5563, the total number of registrations, 102 were wills, 115 were documents affecting movable, and 5346 documents affecting immovable property. Of the last class, in addition to 1244 miscellaneous instruments, 47 were deeds of gift, 2093 were deeds of sale, and 1962 were mortgages. The registered value of the total immovable property transferred was £233,998 (Rs. 23,39,980).

Criminal Justice. *Staff, 1878.*

At present (1878) twenty-seven officers share the administration of criminal justice. Of these seven are magistrates of the first class and twenty of the second and third classes. Of the latter four are unpaid. Of the former, four are covenanted European civilians, one a military commissioned officer, one an Eurasian and one a native. Except the District Magistrate, who has a general supervision over the whole district, each first class magistrate has an average charge of 640 square miles and a population of 138,273 souls. In the year 1876 the first class magistrates decided 668 original and 364 appeal criminal cases. Of the seven first class magistrates, four have as Collector, assistant collectors, and deputy collector, revenue charge of the parts of the district in which they exercise magisterial powers. Of subordinate magistrates there are twenty, all of them natives, with an average charge of 192 square miles and a population of 41,482 souls. In 1876 they decided 2924 original criminal cases. Besides

Chapter IX.
Justice.
Criminal Justice.

their magisterial duties these officers, exclusive of the unpaid magistrates, exercise revenue powers as mámlatdárs or the head clerks of mámlatdárs. Fourteen of the village headmen, of whom there are 487 with an average annual pay of £5 14*s*. (Rs. 57), have been entrusted with powers of fining and imprisoning, and the rest with the powers contemplated by the Bombay Village Police Act VIII. of 1867.

Offences, 1871-1877.

From the table of offences given below, it will be seen that during the seven years ending 1877, 3866, or one offence for every 214 of the population, were on an average committed. Of these there were, on an average, sixteen murders and attempts to commit murder; seven culpable homicides; seventy-six cases of grievous hurt and hurt by dangerous weapons; forty-seven cases of dacoity and robbery; and 3719 or 96 per cent of the whole, minor offences.

Police, 1803-1878.

It has been noticed in the Land Administration chapter[1] that the eastern districts, Dholka, Dhandhuka, and Gogha, when handed over in 1803 were most difficult to manage. In 1814 boundary disputes, formerly settled by fights between several hundred armed men had, to a great extent, ceased; the feuds of the different chiefs had been suppressed, and the Káthi raids almost stopped. Still, among Rajputs, cases of self-outlawry were common, and so strong was the feeling of insecurity that long before nightfall husbandmen were in the habit of leaving their fields and seeking shelter within their walled or hedge-girt villages. It was most difficult to bring a criminal to justice.[2] The districts acquired in 1817 were also in a disorderly state. In the north-east the chief cause of disturbance was the organized class of plunderers known as Chuvália Kolis who, in 1819, 1824, and 1825 raised disturbances. Troops were sent to suppress the revolt and the chiefs forced to give securities for good behaviour. In the eastern districts, oppression and insecurity were driving people away. The city of Ahmedabad and its neighbourhood were in a most disturbed state. Every night attempts at robbery were made and the country round was infested with bands of plunderers, both mounted and on foot.

Vigorous police measures were at once taken, and in spite of occasional gang robberies, order was established as early as 1820. At this time and for several years after, cattle-stealing was practised on a very large scale. Especially in the outlying parts, the Bhils had a regular system, known as *káli chitri*, of pounding cattle and giving them up if the owners agreed to pay them a sum of money.[3] But though for several years cattle-stealing remained almost unchecked, the more serious crime of armed raiding was slowly but steadily put down. In 1828 gang robberies were far rarer than they used to be;[4] in 1835 'large and fearful' raids had almost entirely ceased;[5] in

---

1 See pages 146, 150. 2 Ham. Des. of Hin. I. 693.

3 In 1825 in the eastern districts the Bhils generally took the cattle they stole to some large village where the owner by some hint or by following up the foot-prints generally traced them. He was told he might get his animals back for a certain sum. If he agreed all was settled, if he refused the Bhils carried the cattle to the hills and redress was hopeless. Under these circumstances the owner almost always paid. Bom. Gov. Sel. X. 11.

4 Circuit Judge, 20th April 1828. 5 Circuit Judge, 19th February 1836.

Police, 1803-1878.

1839 the district was surprisingly peaceful,[1] and in 1849 robberies were no longer the work of organized bands but of individual hate or greed.[2] The chief difficulty the police at present (1878) find in detecting crime is due to the fact that the district is, except on the south where it marches with Kaira, entirely surrounded by native states. Other hindrances to the suppression of crime are, the great difficulty of travelling during the rainy season in the western districts, and the large number of tribes, Vanjárás, Sarániás, Bajániás, Thoris, and Vághris, who wander about committing petty thefts. Agrarian crimes are not very common and are confined to cases in which the cultivator is overwhelmed by his creditor's demands. Another class of quarrels arises from grazing disputes. But these are very rare. Poisoning is an unusual form of crime. Gang robberies, though not by professional men, are less uncommon. A few men, generally Káthiáwár or Gáikwár's outlaws, *bahárvatiás*, armed with swords and guns, start with horses and camels, rob and make a straight run for foreign territory.

Cost, 1877.

In the year 1877 the total strength of the district, or regular police force, was 1234. Of these, under the Superintendent and assistant superintendent, three were subordinate officers, 226 inferior subordinate officers, 101 mounted police, and 902 constables. The cost of maintaining this force was for the two European officers, the Superintendent and the assistant superintendent, a total yearly salary of £1140 (Rs. 11,400); for the subordinate officers on yearly salaries of not less than £120 (Rs. 1200), and the inferior subordinate officers on yearly salaries of less than £120 (Rs. 1200), a total yearly cost of £6229 4*s.* (Rs. 62,292); and for the 101 mounted police and the 902 constables a sum of £13,009 4*s.* (Rs. 1,30,092). Besides pay a total yearly sum of £618 (Rs. 6180) was allowed for the horses and travelling expenses of the superior officers; £308 8*s.* (Rs. 3084) yearly pay and travelling allowance for their establishments, and £995 4*s.* (Rs. 9952) a year for contingencies and other expenses, raising the total yearly police charges to £22,300 (Rs. 2,23,000). On an area of 3854 square miles, and a population of 829,637 souls these figures give one man for every 3·12 square miles and 672 souls. The cost of the force is £5 15*s.* 9*d.* (Rs. 57-14 *as.*) the square mile, or 6¼*d.* (4⅛ *as.*) to each head of population. Of the total strength of 1232, exclusive of the Superintendent and assistant superintendents, forty, four of them officers and thirty-six men, were in 1877 employed as guards at district, central, or subsidiary jails; eighty-seven, fourteen of them officers and seventy-three men, were engaged as guards over treasuries, lock-ups, or as escorts to prisoners and treasure; 719, 131 of them officers and 588 men, were engaged on other duties; and 386, eighty of them officers and 306 men, were stationed in towns, municipalities, and cantonments. Of the whole number, exclusive of the Superintendent and assistant superintendent, 400 were provided with fire-arms and 832 with swords or with swords and batons; 502, of whom 155 were officers and 347 men, could read and write; and 270, of whom thirty were officers and 240 men, were under instruction.

---

[1] Circuit Judge, 19th March 1839. [2] Bom. Gov. Sel. V. 73.

Chapter IX.
Justice.
Police.

Except the Superintendent and assistant superintendent who were Europeans and a subordinate officer drawing less than £120 (Rs. 1200) a year who was an Eurasian, the members of the police force were all natives of India. Of these, ninety-seven officers and 414 men were Muhammadans; twenty-two officers and fifty-four men were Bráhmans; eleven officers and eighty-two men were Rajputs; nineteen officers and forty-three men were Maráthás; twelve officers and sixty-six men were Bhils; forty-six officers and 250 men were Kolis; seventeen officers and sixty-eight men were Hindus of other castes; one officer was a Pársi; and one officer and one man were Jews. There were 27 vacancies.

Working, 1877.

Of 474 persons accused of heinous crimes, 205 or 43·24 per cent were convicted. Of 7438 the total number of persons accused of crimes of all sorts, 4243 or 57·04 per cent were convicted. In the matter of the recovery of stolen property, of £3658 4*s*. (Rs. 36,582) alleged to have been stolen, £2353 (Rs. 23,530) or 64·32 per cent of the whole amount were recovered. Of the five districts of Gujarát, Ahmedabad in 1877 ranked second, both as regards the proportion of convictions to arrests and the proportion of the amount of property recovered to the amount stolen.

Crime, 1871-1877.

The following table gives the chief crime and police details for the seven years ending 1877:

Ahmedabad Crime and Police, 1871-1877.

Year.	Offences and Convictions.															
	Murder and attempt to Murder.				Culpable Homicide.				Grievous hurt and hurt by dangerous weapons.				Dacoities and Robberies.			
	Number.	Arrests.	Convictions.	Percentage.	Number.	Arrests.	Convictions.	Percentage.	Number.	Arrests.	Convictions.	Percentage	Number.	Arrests.	Convictions.	Percentage.
1871	23	43	10	23·25	6	8	...	...	66	139	30	21·58	61	135	27	20 00
1872	16	27	3	11·11	8	26	3	11·53	81	222	71	31·98	55	139	51	36·69
1873	9	21	6	28·57	10	16	3	18·75	90	206	80	38·83	58	139	42	30·21
1874	13	40	10	25·00	5	6	4	66·66	79	153	79	51·63	43	120	51	42·50
1875	21	46	8	17·39	11	19	9	47·36	68	132	49	37·12	32	75	19	25·33
1876	10	20	8	40·00	5	6	4	66·66	70	141	38	26·95	36	70	21	30·00
1877	23	45	6	13·33	2	8	3	37·50	75	139	80	57·55	48	282	116	41·13

Year.	Offences and Convictions—*continued.*								Property.		
	Other Offences.				Total.				Stolen.	Recovered.	Percentage.
	Number.	Arrests.	Convictions	Percentage.	Number.	Arrests.	Convictions.	Percentage.	£. s.	£. s.	
1871	5130	7342	4443	60·51	5286	7667	4510	58·82	7403 18	2704 14	36·53
1872	3917	6108	3239	53·02	4077	6522	3367	51·62	8358 12	2453 10	29·35
1873	3441	6314	3230	51·15	3608	6696	3361	50·19	5431 10	1702 6	31·34
1874	3175	5598	2870	51·26	3315	5917	3014	50·93	5915 14	3500 0	59·16
1875	3598	5913	2787	47·13	3730	6185	2872	46·43	6617 16	3289 12	49·70
1876	2967	5386	3236	60·08	3088	5623	3307	58·81	5025 14	2594 10	51·62
1877	3808	6964	4038	57 98	3956	7438	4243	57 04	3658 4	2353 0	64·32

Chapter IX.

Justice.

Police.

Corresponding details are available for the five years ending 1849:

Ahmedabad Crime and Police, 1845-1849.

Year.	Murder.	Homicide.	Robbery, including Cattle thefts	Miscellaneous.	Total.	Apprehended.	Convicted.	Percentage	Property stolen.	Property recovered.	Percentage
									£. s	£. s.	
1845 .	17	8	911	1796	2732	3410	1895	55·57	6884 10	344 4	4·99
1846 .	25	4	1000	1523	2552	3252	1776	54·61	8760 18	974 8	11 11
1847 ..	23	8	1042	1764	2837	3476	2110	60 70	12,062 8	2404 10	19 93
1848 ..	26	5	1029	1848	2908	3907	2173	55 61	10,075 18	889 12	8 82
1849 ..	26	8	1009	1720	2763	3314	1832	55·28	10,793 2	807 8	7 48
Total	117	33	4991	8651	13,792	17,359	9786	56 37	48,585 16	5420 2	11·15

Offences, 1845-1849 and 1873-1877.

A comparison of the two tabular statements shows for the whole amount of crime a slight comparative increase from a yearly average of 2758 in 1849 and the four preceding years, or on the basis of the 1846 census, one crime to every 214 inhabitants, to a yearly average of 4003 in 1877 and the four preceding years, or on the basis of the 1872 census returns one crime to every 207 inhabitants. Among the more heinous crimes there is a considerable falling off, murder showing a fall from a yearly average of twenty-three to sixteen, and simple and gang robberies from 998 to 163.

Jails.

Besides the accommodation provided for under-trial prisoners at the head-quarters of each sub-division, there are at Ahmedabad two jails, one in the city and the other outside of the city known as the Dhuliákot jail. The Ahmedabad jail, with accommodation for 393 prisoners and managed by a staff thirty-seven strong, occupies the very handsome Musalmán building known as A'zam Khán's palace. It had in 1877 a total population of 2155 prisoners and a daily average of 424. About two-thirds of the prisoners sentenced to long terms are employed within jail limits in grinding, oil-pressing and carpentry; the short term prisoners are employed outside in gardening and road-making. The jail industries are carpet-making, cotton-cloth weaving, and canework. The total cost was, in 1877, £3013 (Rs. 30,130), or an average of £7 (Rs. 70) to each prisoner. The Dhuliákot jail, about 1½ miles west of the city of Ahmedabad, in the old lines of the Gujarát Irregular Horse, was started in 1866 to relieve the other Gujarát jails. The buildings consist of ten barracks, one used as a weaving factory and the other nine accommodating 324 prisoners. This jail managed by a staff fifty-seven strong had, in 1878, a population of 1207 and a daily average of 551. The jail grounds cover an area of ninety acres of which thirty are under tillage. The prisoners are mostly employed outside, some in cultivation and some in brick and lime-making, while gangs are furnished for making and repairing roads. The jail has always been remarkably healthy. The total cost in 1878 was £3699 (Rs. 36,990) or an average of £7 (Rs. 70) to each prisoner.

CHAPTER X.

REVENUE AND FINANCE.

Chapter X.

Revenue and Finance.

Balance Sheet, 1822-1877.

THE earliest available district balance sheet is for 1821-22, and though since then many account changes have been made, the different items can in most cases be brought under corresponding heads in the forms now in use. Exclusive of £54,235 (Rs. 5,42,350) the adjustment on account of alienated land, the total transactions entered in the district balance sheet for 1876-77, amounted, under receipts to £469,076 (Rs. 46,90,760) against £201,606 (Rs. 20,16,060) in 1821-22, and under charges to £447,541 (Rs. 44,75,410) against £206,572 (Rs. 20,65,720). Exclusive of salt revenue departmental miscellaneous receipts, and payments in return for services rendered such as post and telegraph receipts, the 1876-77 revenue, under all heads, Imperial, provincial, local, and municipal, came to £284,047 (Rs. 28,40,470), or on a population of 829,637 a share of 6*s*. 10⅙*d*. a head. As no census details are available for 1821-22, corresponding information for that year cannot be given.

Land Revenue.

During the fifty-five years between the dates of the two balance sheets the following changes have taken place under the chief heads of receipts and charges: Land revenue receipts, forming 66·10 per cent of £284,047 (Rs. 28,40,470) the entire revenue of the district, have risen from £145,477 (Rs. 14,54,770) in 1821-22 to £187,781 (Rs. 18,77,810) in 1876-77. The increase is chiefly due; (1) to the introduction of revised rates of assessment; (2) to the large area of land brought under tillage; and (3) to the settlement of alienated land. The land revenue charges show a decrease from £25,786 (Rs. 2,57,860) in 1821-22 to £16,921 (Rs. 1,69,210). The cost of collecting the land revenue has increased owing to a rise in the number and amount of revenue officers' salaries; the apparent decrease is due to the transfer of hereditary officers' payments from the head of 'land revenue' to that of 'allowances and assignments.'

The following statement[1] shows the land revenue collected in each of the forty-eight years ending 1878:

---

[1] Figures for the years between 1830 and 1862 are taken from statement No. 13 in Mr. Bell's Excise Report dated 1st October 1869. Figures for subsequent years are taken from the annual reports.

Chapter X.

Revenue and Finance.

Balance Sheet, 1822-1877.

Ahmedabad Land Revenue, 1830-1878.

Year.	Land Revenue.	Year.	Land Revenue.	Year.	Land Revenue.
	£.		£.		£.
1830-31 ...	103,767	1846-47 ...	122,873	1862-63 ...	144,925
1831-32 ...	128,334	1847-48 ...	115,631	1863-64 ...	157,733
1832-33 ...	102,101	1848-49 ...	95,137	1864-65 ...	150,410
1833-34 ...	86,096	1849-50 ...	110,307	1865-66 ...	145,823
1834-35 ...	120,208	1850-51 ...	111,047	1866-67 ...	146,941
1835-36 ...	120,754	1851-52 ...	112,595	1867-68 ...	150,734
1836-37 ...	120,574	1852-53 ...	110,272	1868-69 ...	151,454
1837-38 ...	123,779	1853-54 ...	114,901	1869-70 ...	148,374
1838-39 ...	126,126	1854-55 ...	128,827	1870-71 ...	147,166
1839-40 ...	119,130	1855-56 ...	118,795	1871-72 ...	147,378
1840-41 ...	112,123	1856-57 ...	126,834	1872-73 ...	147,170
1841-42 ...	125,118	1857-58 ...	120,588	1873-74 ...	145,777
1842-43 ...	116,443	1858-59 ...	119,299	1874-75 ...	144,179
1843-44 ...	121,098	1859-60 ...	131,941	1875-76 ...	142,817
1844-45 ...	118,393	1860-61 ...	130,768	1876-77 ...	142,683
1845-46 ...	118,708	1861-62 ...	138,511	1877-78 ...	143,205

Stamps.

Stamp receipts have risen from £6070 to £22,444 (Rs. 60,700-Rs. 2,24,440) and the expenditure from £403 to £690 (Rs. 4030-Rs. 6900).

Excise.

Unlike the southern districts of Gujarát, liquor is little used. Excise receipts have risen from £2477 to £7018 (Rs. 24,770-Rs. 70,180), and the expenditure from £112 to £123 (Rs. 1120-Rs. 1230).

Justice.

Law and justice receipts, chiefly fines, have risen from £465 to £2250 (Rs. 4650-Rs. 22,500). The 1876-77 charges were £18,876 (Rs. 1,88,760) against £9420 (Rs. 94,200) in 1821-22.

Forests.

There are no forests.

Assessed Taxes.

The following table shows, exclusive of official salaries, the amount realized from the different assessed taxes levied between 1860 and 1873. Owing to their variety of rates and incidence it is difficult to make any satisfactory comparison of the results :

Ahmedabad Assessed Taxes, 1860-1872.

Year.	Incomes.				Realizations.	
	Below £50.		Above £50.			
Income Tax.	£.	Rs.	£.	Rs.	£.	Rs.
1860-61	419,226	41,92,260	392,840	39,28,400	23,078	2,30,780
1861-62	398,290	39,82,900	397,155	39,71,550	23,782	2,37,820
1862-63	...	...	462,054	46,20,540	15,864	1,58,640
1863-64	...	...	395,603	39,56,030	12,360	1,23,600
1864-65	...	...	375,080	37,50,800	12,336	1,23,360
License Tax.						
1867-68	316,642	31,66,420	451,703	45,17,030	7903	79,030

Chapter X, Revenue and Finance.

Balance Sheet, 1822-1877.

Ahmedabad Assessed Taxes, 1860-1872—continued.

Year.	Income.				Realizations.	
	Below £50.		Above £50.			
Certificate Tax.	£.	Rs.	£.	Rs.	£.	Rs.
1868-69	...	...	53,637	5,36,370	5503	55,030
Income Tax.						
1869	..	...	742,862	74,28,620	7823	78,230
1869-70	...	...	725,570	72,55,700	3908	39,080
1870-71	...	...	536,097	53,60,970	15,694	1,56,940
1871-72	...	...	...	...	4627	46,270
1872-73	...	...	...	...	3286	32,860

Customs. Customs receipts have fallen from £22,547 to £10,844 (Rs. 2,25,470-Rs. 1,08,440).

Salt. There was no duty on salt in 1821-22. The 1876-77 receipts amounting to £99,734 (Rs. 9,97,340) represent the revenue of the Khárághoda salt works.

Political. The 1876-77 charges of £7046 (Rs. 70,460) under Political Agencies represent the cost of the Mahi Kántha and Pálanpur Agencies.

Military. The 1876-77 military charges on account of the Ahmedabad and Deesa troops and garrison were £145,276 (Rs. 14,52,760) against £38,290 (Rs. 3,82,900) in 1821-22.

Registration. Registration and education are new heads.

Jail. The 1876-77 jail receipts, £3527 (Rs. 35,270), represent the earnings of the Dhuliakot and Ahmedabad jails. The charges under this head have risen from £1404 to £7165 (Rs. 14,040 - Rs. 71,650).

Transfer. Transfer receipts have risen from £22,949 to £96,368 (Rs. 2,29,490-Rs. 9,63,680) and charges from £93,652 to £107,257 (Rs. 9,36,520-Rs. 10,72,570). The increased receipts are due chiefly to receipts on account of local funds, to remittances from other treasuries, to the amount held as deposit on account of savings banks, and to the recovery of loans made to landed proprietors, *tálukdárs.*

Balance Sheet, 1822-1877. In the following balance sheets of 1821-22 and 1876-77, the figures shown in black type on both sides of the 1876-77 balance sheet are book adjustments. On the receipt side the item £54,235 (Rs. 5,42,350) represents the additional revenue the district would yield had none of its land been given away. On the debit side the item £1425 (Rs. 14,250) under land revenue is the rental of the lands granted to village headmen, except those engaged solely on police duties, and the village watch. The item £50,269 (Rs. 5,02,690) under 'allowances and assignments' represents the rental of the lands granted to district hereditary officers, to *girásiás,* and other non-service claimants; the item £2541 (Rs. 25,410) under

Balance Sheet, 1822-1877.

police represents the rental of the lands granted to village headmen employed solely on police duties. Cash allowances are, on the other hand, treated as actual charges and debited to the different heads of account according to the nature of the allowance. Thus cash grants to village headmen, except those engaged solely on police duties and the village watch, are included in £16,921 (Rs. 1,69,210), the total of land revenue charges; cash grants to non-service claimants are included in £11,958 (Rs. 1,19,580), the total of allowance and assignment charges; and cash grants to *patels* employed solely on police duties are included in £25,661 (Rs. 2,56,610), the total of police charges.

Chapter X, Revenue and Finance. Balance Sheet, 1822-1877.

Ahmedabad Assessed Taxes, 1860-1872—continued.

Year.	Income.				Realizations.	
	Below £50.		Above £50.			
	£.	Rs.	£.	Rs.	£.	Rs.
Certificate Tax.						
1868-69	...	...	53,637	5,36,370	5503	55,030
Income Tax.						
1869	..	...	742,862	74,28,620	7823	78,230
1869-70	...	...	725,570	72,55,700	3908	39,080
1870-71	...	...	536,097	53,60,970	15,694	1,56,940
1871-72	...	...	...	...	4627	46,270
1872-73	...	...	...	...	3286	32,860

Customs. Customs receipts have fallen from £22,547 to £10,844 (Rs. 2,25,470-Rs. 1,08,440).

Salt. There was no duty on salt in 1821-22. The 1876-77 receipts amounting to £99,734 (Rs. 9,97,340) represent the revenue of the Khárághoda salt works.

Political. The 1876-77 charges of £7046 (Rs. 70,460) under Political Agencies represent the cost of the Mahi Kántha and Pálanpur Agencies.

Military. The 1876-77 military charges on account of the Ahmedabad and Deesa troops and garrison were £145,276 (Rs. 14,52,760) against £38,290 (Rs. 3,82,900) in 1821-22.

Registration. Registration and education are new heads.

Jail. The 1876-77 jail receipts, £3527 (Rs. 35,270), represent the earnings of the Dhuliakot and Ahmedabad jails. The charges under this head have risen from £1404 to £7165 (Rs. 14,040 - Rs. 71,650).

Transfer. Transfer receipts have risen from £22,949 to £96,368 (Rs. 2,29,490-Rs. 9,63,680) and charges from £93,652 to £107,257 (Rs. 9,36,520-Rs. 10,72,570). The increased receipts are due chiefly to receipts on account of local funds, to remittances from other treasuries, to the amount held as deposit on account of savings banks, and to the recovery of loans made to landed proprietors, *tálukdárs.*

Balance Sheet, 1822-1877. In the following balance sheets of 1821-22 and 1876-77, the figures shown in black type on both sides of the 1876-77 balance sheet are book adjustments. On the receipt side the item £54,235 (Rs. 5,42,350) represents the additional revenue the district would yield had none of its land been given away. On the debit side the item £1425 (Rs. 14,250) under land revenue is the rental of the lands granted to village headmen, except those engaged solely on police duties, and the village watch. The item £50,269 (Rs. 5,02,690) under 'allowances and assignments' represents the rental of the lands granted to district hereditary officers, to *girásiás,* and other non-service claimants; the item £2541 (Rs. 25,410) under

police represents the rental of the lands granted to village headmen employed solely on police duties. Cash allowances are, on the other hand, treated as actual charges and debited to the different heads of account according to the nature of the allowance. Thus cash grants to village headmen, except those engaged solely on police duties and the village watch, are included in £16,921 (Rs. 1,69,210), the total of land revenue charges; cash grants to non-service claimants are included in £11,958 (Rs. 1,19,580), the total of allowance and assignment charges; and cash grants to *patels* employed solely on police duties are included in £25,661 (Rs. 2,56,610), the total of police charges.

Chapter X.

Revenue and Finance.

Balance Sheet, 1822-1877.

Ahmedabad Balance

Service.	Receipts. Head.	1821-22. £. s. d.	1876-77. £. s. d.
Imperial.			
A.—Supervised by the Collector.	Land revenue	145,477 13 0	187,781 7 9
			54,235 0 0
	Stamps	6070 8 3	22,444 11 8
	Excise	2477 1 6	7018 7 2
	Law and justice	465 0 3	2250 9 3
	Forest	.. ..	4 9 9
	Assessed taxes	.	2 14 0
	Miscellaneous	1125 1 7	323 18 9
	Interest on advances, loans, and arrears ..	33 9 0	1431 19 10
	Total ...	155,648 13 7	221,257 18 2
			54,235 0 0
B.—Administered by Departmental Heads.	Customs	22,547 2 3	10,844 14 3
	Salt	.	99,734 15 6
	Public works	34 2 7	2778 14 4
	Military	. ...	16,719 17 1
	Mint	....	13 18 0
	Post	334 0 0	10,108 12 7
	Telegraph	.....	3088 13 8
	Total ...	22,915 4 10	143,289 5 5
Provincial	Registration	.....	1643 17 8
	Education	.. ...	1156 0 10
	Police	18 1 0	1085 0 7
	Medical	. ..	232 13 6
	Jails	61 3 9	3527 19 8
	Miscellaneous	14 0 0	476 11 2
	Printing	.....	39 5 2
	Total ..	93 4 9	8160 8 7
Transfer items of accounts.	Deposits and repayments of advances and loans.	141 16 7	23,962 16 7
	Bills and cash remittances	22,545 13 5	50,514 14 5
	Pension fund receipts	262 0 10	592 16 6
	Local funds	.....	21,298 3 11
	Total ...	22,949 10 10	96,368 11 5
	Grand Total ...	201,606 14 0	469,076 3 7
			54,235 0 0

Sheet, 1821-22—1876-77.

CHARGES.

Head.	1821-22.	1876-77.
	£. s. d.	£. s. d.
Refunds	107 8 9	3104 17 3
Land revenue	25,786 16 10	16,921 5 11
		1425 0 0
Stamps	403 0 0	690 7 2
Excise	112 8 0	123 1 6
Minor Departments		645 19 7
Law and justice { Civil	8828 18 9	12,110 5 8
Law and justice { Criminal	592 0 4	6766 4 9
Ecclesiastical		1827 1 4
Medical		1830 8 5
Political	362 12 3	7046 1 9
Allowances and assignments	2245 14 10	11,958 7 7
		50,269 0 0
Pensions to Government servants	87 0 0	4498 11 11
Miscellaneous	3263 4 0	33 9 3
Total	41,789 3 9	67,556 2 1
		51,694 0 0
Customs	19,219 16 11	3240 15 4
Salt		11,927 16 1
Public works	3175 1 9	50,944 8 4
Military	38,490 0 0	145,276 4 9
Mint		315 7 7
Post	122 0 0	7546 17 7
Telegraph		9306 0 9
Total	60,806 18 8	228,557 10 5
Refunds	.....	442 9 6
Registration		843 0 6
Education		5243 12 5
Police	8081 8 0	25,661 12 3
		2541 0 0
Medical	764 12 1	3546 19 11
Jails	1404 1 10	7165 6 7
Cemeteries, office rents, &c.	74 0 0	328 9 6
Minor departments	.....	743 1 6
Miscellaneous	.....	195 10 3
Total	10,324 1 11	44,170 2 5
		2541 0 0
Deposits returned and advances and loans made	101 12 7	21,453 11 9
Bills and cash remittances	93,550 18 0	64,645 19 11
Interest on Government securities		6220 1 6
Local funds	.....	14,938 1 1
Total	93,652 10 7	107,257 14 3
Grand Total	206,572 14 11	447,541 9 2
		54,235 0 0

Chapter X.

Revenue and Finance.

Local Funds.

Revenue other than Imperial.

The district local funds, collected since 1863 to promote rural education and supply roads, water, drains, rest-houses, dispensaries, and other useful objects, amounted in the year 1877-78 to a total sum of £16,583 (Rs. 1,65,830) and the expenditure to £21,263 (Rs. 2,12,630). This revenue is drawn from three sources, a special cess of one-sixteenth in addition to the ordinary land tax, the proceeds of certain subordinate local funds, and some miscellaneous items of revenue. The special land cess, of which two-thirds are set apart as a road fund and the rest as a school fund, yielded in 1877-78 a revenue of £11,799 (Rs. 1,17,990). Smaller funds, including a ferry fund, a cattle pound fund, a travellers' bungalow fund, and a school fee fund yielded £1852 (Rs. 18,520). Government and private subscriptions amounted to £2461 (Rs. 24,610), and miscellaneous receipts including certain items of land revenue to £467 (Rs. 4670). This revenue is administered by committees composed partly of official and partly of private members.

For administrative purposes the local funds of the district are divided into two main sections, one set apart for Public Works and the other for instruction. The receipts and disbursements during the year 1877-78 under those two heads were as follows:

Ahmedabad Local Funds, 1877-78.

PUBLIC WORKS

Receipts	£.	s.	Expenditure.	£.	s.
Balance, 1st April 1877	6907	10	Establishment ..	1996	19
Two-thirds of the land cess..	7866	10	New works ...	6313	9
Ferries .	321	4	Repairs .. .	4689	14
Cattle pounds .	783	16	Medical charges	660	19
Travellers' rest-houses	53	10	Miscellaneous .	267	17
Contributions . .	779	6	Balance, 1st April 1878 .	2861	0
Miscellaneous ..	78	2			
Total	16,789	18	Total ..	16,789	18

EDUCATION

	£.	s.		£.	s.
Balance, 1st April 1877	2310	18	School charges ..	5977	9
One-third of the land cess	3933	5	Scholarships ...	228	16
School fee fund .	695	2	School houses, new	436	6
Contribution (Government) .	1462	16	Do. repairs	551	9
Ditto (private)	220	4	Miscellaneous	140	17
Miscellaneous	237	3	Balance, 1st April 1878 ..	1676	13
Interest on funded investment	152	2	.		
Total	9011	10	Total .	9011	10

Since 1863 the following local fund works have been carried out. To improve communication, 252 miles of road were either made cleared or repaired, and planted with trees. To improve the water supply, 339 wells, seventy-one ponds, and twenty-five water-courses

have been made or repaired. To help village instruction, sixty-five schools, and for the comfort of travellers fifty-five rest-houses, *dharamsálás*, and eighty-five village offices, *chorás*, have been built. Besides these works, four dispensaries, 104 cattle pounds, and three staging bungalows have been constructed.

Municipalities.

In 1877-78 there were eight municipalities. The total municipal revenue in 1877-78 amounted to £33,235 (Rs. 3,32,350). Of this sum £16,813 (Rs. 1,68,130) were recovered from octroi dues, £3324 (Rs. 33,240) from a toll and wheel-tax, £3948 (Rs. 39,480) from assessed taxes, and £9149 (Rs. 91,490) from miscellaneous sources.

Under the provisions of the Bombay District Municipal Act (VI of 1873) Ahmedabad forms a city municipality; its funds, under the presidency of the Collector, being administered by a body of commissioners, official and private, in the proportion of at least two of the latter to one of the former. Under the same Act, the rest are town municipalities administered by a body of commissioners with the Collector as president and the Assistant or Deputy Collector in charge of the sub-division as vice-president, the commissioners being chosen in the same way as the city municipality commissioners.

The following statement gives for each municipality the receipts, charges, and incidence of taxation during the year ending 31st March 1878:

Ahmedabad Municipal Details, 1878.

Name.	Date of establishment.	Population.	Receipts.					
			Octroi.	House tax.	Tolls and wheel tax.	Assessed taxes.	Miscellaneous.	Total.
			£. s.		£. s.	£. s.	£. s.	£. s.
Ahmedabad ...	1st June 1858 ...	116,873	12,189 0	...	2854 4	3948 12	8552 17	27,544 13
Viramgám ...	11th May 1857 .	19,661	2373 10	...	58 3	...	199 14	2631 7
Dholka	1st Aug. 1857 .	20,854	952 5	...	181 12	..	343 4	1477 1
Dhandhuka ...	1st March 1860 .	9782	314 10	...	224 9	..	13 6	552 5
Gogha	1st July 1855 ...	9571	324 2	...	5 18	...	21 5	351 5
Modása	1st Nov. 1859 ...	7436	274 12	...	...	...	11 6	285 18
Parántij	1st July 1855 .	8341	241 4	...	...	...	2 13	243 17
Mándal	15th Nov. 1866 ..	6774	143 18	...	...	...	5 7	149 5
Total ...	.....	...	16,813 1	...	3324 6	3948 12	9149 12	33,235 11

Name.	Charges.								Incidence.
	Staff.	Safety.	Health.	Instruction.	Works.		Miscellaneous.	Total.	
					Original	Repairs.			
	£. s.	£. s.	£. s.	£. s.	£. s.	£. s.	£. s.	£. s.	s. d.
Ahmedabad ...	1986 14	3515 17	14,690 12	706 0	1798 13	2011 5	7089 0	31,798 1	4 8
Viramgám ...	89 12	359 12	717 14	90 0	1363 0	63 11	124 17	2808 6	2 8
Dholka ...	248 15	353 16	719 18	43 12	172 10	75 3	66 14	1680 18	1 5
Dhandhuka ..	55 13	204 6	236 10	...	...	9 16	84 2	590 7	1 1
Gogha	44 3	75 4	143 18	...	...	25 0	23 17	311 2	0 8
Modása ...	28 6	76 13	102 4	...	44 17	5 0	17 2	274 2	0 9
Parántij ...	35 18	48 18	81 16	1 19	...	20 5	14 15	203 11	0 7
Mándal ...	42 0	51 6	51 7	...	..	0 2	4 6	149 1	0 5
Total ...	2531 1	4685 12	16,742 19	841 11	3379 0	2210 2	7424 13	37,814 18	...

Chapter X.

Revenue and Finance.

At present (1878) an establishment in connection with the Cotton Frauds Act (Bombay Act VII of 1878) for preventing the adulteration of cotton is, under the control of the Collector, maintained at a total yearly cost of £631 (Rs. 6310). This charge is met from the Cotton Improvement Fund. The establishment consists of three sub-inspectors with monthly salaries varying from £12 to £25 (Rs. 120 - Rs. 250) and five messengers.

Dharam Talâv Fund.

The Dholera *Dharam Talâv* Fund managed by the Collector was, about 1818, raised to secure a supply of water along the road to Dholera. It has always been supported by voluntary contributions from the owners of merchandise passing through the town. In 1877-78 its revenue amounted to £1050 (Rs. 10,500).

CHAPTER XI.

INSTRUCTION.

Chapter XI.
Instruction.

Schools, 1877-78.

In 1877-78 there were 175 Government schools, or on an average one school for every five inhabited villages alienated as well as Government, with 11,440 names on the rolls and an average attendance of 8179 pupils or 1 91 per cent of 426,024, the entire population of not more than twenty years of age.

Cost.

Excluding superintendence charges, the total expenditure on education on account of these as well as aided and other schools, amounted to £10,100 (Rs. 1,01,000), of which £4014 (Rs. 40,140) were debited to Government and £6086 (Rs. 60,860) to local and other funds.

Staff.

Under the Director of public instruction, and the educational inspector, northern division, the schooling of the district was, in 1877-78, conducted by a local staff 417 strong; of these one was a deputy inspector with general charge over all the schools of the district, drawing a yearly pay of £210 (Rs. 2100); one was an assistant deputy inspector entrusted with the examination of the schools in the Dholka and Dhandhuka sub-divisions and drawing a yearly pay of £90 (Rs. 900); and the rest were masters and assistant masters of schools with yearly salaries ranging from £600 to £2 8*s*. (Rs. 6000 - Rs. 24).

Instruction.

Of 175 the total number of Government schools, in 163 Gujaráti only was taught, and in six Urdu. In the six remaining schools instruction was given in English and Gujaráti; and one was a high school teaching English, Gujaráti, and a classical language (Sanscrit or Latin) up to the standard required to pass the Bombay University entrance test examination. Of the Gujaráti schools, two were training or normal schools, one for men and the other for women.

Private Schools.

In addition to the Government schools there were thirteen private schools. Of these eleven were Government aided schools and the remaining two were inspected by educational officers.

Progress, 1826-1878.

The following figures show the increased means for learning to read and write offered by Government to the people during the last fifty-two years. The first two Government vernacular schools were opened in the city of Ahmedabad in 1826; and a third in 1827 at Dholka. Three years later, in 1830, a vernacular school was opened at Dhandhuka; while during the next nineteen years, only three more schools were opened between 1847 and 1849, two at Ahmedabad and one at Dholera. The first English school in the

Chapter XI. Instruction.

district was opened at Ahmedabad in 1846. Four years later, in 1850, there was a total number of 113 names on the rolls. In 1850-51 there were nine Government schools with a total number of 864 pupils enrolled, or 0·25 per cent of 333,893, the total population of not more than twenty years of age. In 1854-55 the number of schools remained the same but the number of pupils rose to 1178. In 1855-56 there were seventeen schools with 1333 names on the rolls and an average attendance of 799 pupils or 0·23 per cent of 333,893, the total population of not more than twenty years of age. Ten years later the number of schools rose to 102 with 8056 names on the rolls and an average attendance of 5441 or 1·62 per cent of 333,893, the total population of not more than twenty years of age. In 1876-77 the total number of all schools in the district was reported to be 185 with 11,455 names on the rolls. In 1877-78 there were 188 schools with 12,579 names on the rolls and an average attendance of 8977 pupils or 2·10 per cent of 426,024, the total population of not more than twenty years of age. A comparison with the returns for 1850 gives, therefore, for 1878 an increase in the number of schools from nine to 188; while of 426,024, the entire population of the district of not more than twenty years of age, 12,579 or 2·95 per cent were under instruction in 1877-78 compared with 864 or 0·25 per cent in 1850-51.

Girls' Schools.

Before 1855-56 there were no girls' schools in the district, but in 1865-66 the district was provided with ten schools for girls with 418 names on the rolls and an average attendance of 254 pupils. Ten years later the number of schools rose to twenty, with 1017 pupils on the rolls and an average attendance of 594 pupils.

Readers and Writers, 1872.

The 1872 census returns give for the two chief races of the district the following proportion of persons able to read and write:

Hindus.

Of 141,219 the total Hindu male population of not more than twelve years of age, 10,987 or 7·78 per cent; of 70,296 above twelve and not more than twenty years, 10,702 or 15·22 per cent; and of 184,557, above twenty years, 30,989 or 16·79 per cent were able to read and write or were under instruction. Of 120,164 the total Hindu female population of not more than twelve years of age, 492 or 0·40 per cent; of 54,362, above twelve, and not more than twenty years, 205 or 0·37 per cent; and of 176,429, above twenty years, 395 or 0·22 per cent were able to read and write or were under instruction.

Musalmáns.

Of 13,524 the total Musalmán male population of not more than twelve years of age, 1247 or 9·22 per cent; of 7007 above twelve and not more than twenty years, 1174 or 16·75 per cent; and of 21,403 above twenty years, 3100 or 14·48 per cent were able to read and write or were under instruction. Of 12,413 the total Musalmán female population of not more than twelve years, 148 or 1·18 per cent; of 6433 above twelve and not more than twenty years, 67 or 1·04 per cent; and of 20,593 above twenty years, 111 or 0·53 per cent were able to read and write or were under instruction.

The returns do not give corresponding details for Pársis.

Chapter XI.
Instruction.

Pupils by Race, 1865-1877.

Before 1865-66 there were no returns arranging the pupils according to race and religion. The statement given in the margin shows that of the three chief races of the district the Pársis have the largest proportion of their boys and girls under instruction.

Pupils by Race, 1865 and 1877.

Race.	1865-66.	Percentage.	1877-78.	Percentage.	Increase.
Hindus ...	7438	1·41	11,218	1·50	0·9
Musalmáns...	56	0·08	1162	1·42	0·34
Pársis ...	62	37·57	199	41·28	3·71
Total...	8056	1·36	12,579	1·51	0·15

Of 10,792, the total number of pupils in Government schools at the end of December 1877 there were 2069 or 19·17 per cent Bráhmans including Vyás (27); 76 or 0·70 per cent writers, 44 Kshatris, 26 Káyasths, and 6 Parbhus; 3448 or 31·94 per cent traders and shopkeepers, 2243 Vániás, 997 Shrávaks, 2 Bhátiás, 190 Luhánás, 10 Kandois, 1 Kharádi, and 5 Tambolis; 2584 or 23·94 per cent cultivators, 1812 Kanbis, 43 Káchhiás, 15 Mális, 465 Rajputs, 245 Kolis, and 4 Rávats; 984 or 9·11 per cent craftsmen, 121 Bhávsárs, calico-printers, 177 Sonis, gold and silver smiths, 196 Suthárs, carpenters, 107 Darjis, tailors, 36 Kansárás, coppersmiths, 81 Luhárs, blacksmiths, 28 Kadiás, bricklayers, 52 Kumbhárs, potters, 24 Khatris, weavers, 8 Khamárs, weavers, 154 Ghánchis, oil-pressers; 75 or 0·69 per cent bards and genealogists, 53 Bháts, 12 Chárans, 3 Bárots, and 7 Bhaváyás; 55 or 0·50 per cent fishers and labourers, 52 Máchhis and 3 Bhoiṣ; 24 or 0·22 per cent shepherds and herdsmen, 4 Bharváds, 15 Rabáris, and 5 A'hirs; 118 or 1·09 per cent servants, 96 Hajáms, barbers, 16 Dhobhis, washermen, and 6 Bhistis, water-drawers; 166 or 1·53 per cent labourers and miscellaneous workers, 39 Golás, rice-pounders, 10 Khárvás, sailors, 9 Vághris, fowlers and hunters, 35 Maráthás, labourers, 3 Márvádis, labourers, 3 Bhádbhunjás, grain-parchers, 40 Sathvárás, vegetable sellers, 7 Kaláls, liquor-sellers, 2 Ods, diggers, 16 Khavás, servants, and 2 Lodhás, labourers; 1 Mochi, shoemaker; 36 or 0·33 per cent religious beggars, 18 Gosáis, and 18 Sádhus; 69 or 0·63 per cent Pársis; 1045 or 9·68 per cent Musalmáns; 29 or 0·26 converts; 13 or 0·12 Jews and Beni Israels. No Dhed or Bhangia boys attended the Government schools.

Of 1169 the total number of girls enrolled in 1877-78 in the eighteen girls' schools, 1110 or 94·95 per cent were Hindus; 25 or 2·15 per cent were Musalmáns; 28 or 2·39 per cent were Pársis; and 6 or 0·51 per cent were others. Besides those in the Female Training College at Ahmedabad there were 15 Hindu and 1 Musalmán paid pupils.

Schools, 1855-1878.

The following table, prepared from special returns furnished by the educational department, shows in detail the number of schools and pupils with their cost to Government:

Chapter XI.
Instruction.
Schools,
1855-1878.

Ahmedabad School Return, 1855-56, 1865-66 and 1877-78.

Class.	Schools.			Pupils.												Average Daily Attendance.		
				Hindus.			Musalmáns.			Pársis.			Total.					
	1855-56.	1865-66.	1877-78.	1855-56.	1865-66.	1877-78.	1855-56.	1865-66.	1877-78.	1855-56.	1865-66.	1877-78.	1855-56.	1865-66.	1877-78.	1855-56.	1865-66.	1877-78.
Government.																		
High school	1	1	1	...	173	174	...	1	2	...	15	9	...	189	185	120	149	149·4
Branch school	...	2	2	...	342	250	...	8	14	...	14	6	...	364	270	...	233	217·3
Anglo-vernacular school	...	8	3	...	1040	97	...	129	4	...	3	5	...	1172	106	...	821	66·9
Vernacular school for ... Boys ...	15	79	153	..	5352	8868	...	406	50	...	30	89	1138	5788	10,007	669	3896	7248 4
Vernacular school for ... Girls ..	...	7	14		154	715	...	9	22	...	...	33	...	163	770	...	108	417 9
Training school ... Men ...	1	1	1	10	79	76	...	...	10	...	...	...	10	79	86	10	54	68·2
Training school ... Women ...	...	...	1	...	...	15	...	...	1	...	...	...	...	...	16	...	...	11·7
Special institution ... Gujarát Provincial College ...	...	1	...	...	46	...	...	...	...	...	...	...	...	46	...	...	34	...
Government Aided.																		
English school	...	...	1	...	...	88	...	...	3	...	...	18	...	...	109	...	...	69·1
Anglo-vernacular school ...	...	...	1	...	...	113	...	...	7	...	...	32	...	...	152	...	...	12·3
Vernacular school for ... Boys ...	...	...	4	...	...	312	...	...	40	...	...	6	...	...	358	...	...	239·2
Vernacular school for ... Girls ..	...	...	4	...	...	395	...	...	3	...	...	1	...	...	399	...	...	267 8
Private Inspected.																		
Vernacular school for ... Boys ...	...	...	2	...	...	19	...	...	3	...	...	...	...	...	22	...	...	20·3
Vernacular school for ... Girls ...	...	3	...	...	252	...	...	3	...	...	...	...	...	255	...	...	146	...
Indigenous school receiving aid from Local Funds.	...	...	1	...	...	96	...	...	3	...	...	...	...	...	99	...	...	78·7
Total ...	17	102	188	10	7438	11,218	...	556	1162	...	62	199	1333	8056	12,579	799	5441	8977·9

Ahmedabad School Return, 1855-56, 1865-66 and 1877-78.

Class.	Fee.			Cost per Pupil.			Receipts.								
							Government.			Local Cess.			Municipalities.		
	1855-56	1865-66.	1877-78.	1855-56.	1865-66.	1877-78.	1855-56.	1865-66.	1877-78.	1855-56.	1865-66.	1877-78.	1855-56.	1865-66.	1877-78.
				£. s. d.	£. s. d.	£. s. d.									
Government.															
High school	1s.	Varying from 1s. to 2s.	Varying from 2s to 3s.	3 18 1¾	16 14 2¾	9 1 6½	470	722	796	...	...	78	...	260	240
Branch school	...	1s.	1s.	...	1 3 4¾	2 16 9½	...	61	234	...	9	23	...	5	195
Anglo-vernacular school	...	Varying from 1½d. to 4½d.	Varying from 6d. to 1s.	...	2 16 6¾	7 7 8	...	332	137	...	74	10	...	138	133
Vernacular school for ... Boys ..	1½d.	...	Varying from ¾d. to 6d.	0 7 9½	0 10 6	0 13 11¾	213	952	1419	...	320	2869	...	...	85
Vernacular school for ... Girls ...	...	Varying from ¾d. to 3d.	...	...	0 14 2¾	0 19 0			...	...		397	...	493	...
Training school ... Men ..	...	6d.	...	0 19 11¼	14 18 7	13 3 4½	10	712	828	...	68	69	...	...	...
Training school ... Women ...	...	...	...	...	...	38 19 5	...	...	381	...	...	75	...	...	...
Special institution ... Gujarát Provincial College.	...	Varying from 1s. to 2s.	...	...	16 10 10½	...	...	165	...	...	...	...	...	...	...
Government Aided.															
English school	...	...	Varying from 1s. to 4s.	...	...	4 1 11	...	...	111	...	...	...	...	...	...
Anglo-vernacular school	...	...	Varying from 6¾d. to 1s.	...	...	1 8 3	...	...	81	...	...	...	...	...	...
Vernacular school for ... Boys ...	...	...	Varying from ¾d. to 1s.	...	...	0 11 4	...	...	17	...	...	...	...	...	...
Vernacular school for ... Girls ...			...	...	...	0 14 6¾	...	...	10	...	...	...	...	...	...
Private Inspected.															
Vernacular school for ... Boys ...	...	...	Varying from 1½d. to 3d.	...	...	1 0 8½	...	...	...	...	...	...	...	...	...
Vernacular school for ... Girls ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Indigenous school receiving aid from Local Funds.	...	...	...	...	...	0 0 1½	...	..	...	...	...	5	...	...	...
Total ...	...	...	...	...	...	...	693	2944	4014	...	471	3526	...	896	653

Ahmedabad School Return—continued.

Class.	Receipts—*continued.* Private. 1855-56.	Private. 1865-66.	Private. 1877-78.	Fees. 1855-56.	Fees. 1865-66.	Fees. 1877-78.	Total. 1855-56.	Total. 1865-66.	Total. 1877-78.	Expenditure. Instruction. 1855-56.	Instruction. 1865-66.	Instruction. 1877-78.	Buildings. 1855-56.	Buildings. 1865-66.	Buildings. 1877-78.	Libraries. 1855-56.	Libraries. 1865-66.	Libraries. 1877-78.
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Government.																		
High school	...	...	...	150	237	242	620	1219	1356	476	1238	1268	...	...8	...	...	...	10
Branch school	...	...	...	...	168	165	...	243	617	...	272	589	...	...7	...	...	...	5
Anglo-vernacular school	...	3	190	...	93	24	...	640	494	...	658	474	...	...5	...	...	...	10
Vernacular school for ... Boys ...	16	68	...	57	294	695	286	2127	5068	259	1954	4923	...	...	...	...	167	145
Vernacular school for ... Girls ...	...	...	...	...	...	...	...	...	397	...	...	388	...	...	...	...	...	9
Training school ... Men ...	...	200	...	...	3	1	10	983	898	10	430	815	...	...	...	...	...	14
Training school ... Women ...	...	...	...	...	...	...	...	...	456	...	...	367	...	...	...	...	...	14
Special institution ... Gujarát Provincial College.	...	367	...	...	30	...	...	562	...	...	562	...	...	...	...	...	...	...
Government Aided.																		
English school	...	...	54	...	...	118	...	...	283	...	...	283	...	...	...	...	...	...
Anglo-vernacular school	...	...	...	...	...	93	...	...	174	...	...	174	...	...	...	...	...	...
Vernacular school for ... Boys ...	...	...	109	...	...	10	...	...	136	...	...	136	...	...	...	...	...	...
Vernacular school for ... Girls ...	...	...	185	...	...	...	...	...	195	...	...	195	...	...	...	...	...	...
Private Inspected.																		
Vernacular school for ... Boys ...	...	...	19	...	...	2	...	...	21	...	...	21	...	...	...	...	...	...
Vernacular school for ... Girls ...	...	125	...	...	...	...	...	125	...	...	128	...	...	...	...	...	...	...
Indigenous school receiving aid from Local Funds.	...	...	...	...	...	...	...	...	5	...	...	5	...	...	...	...	...	...
Total ...	16	763	557	207	825	1350	916	5899	10,100	745	5242	9638	...	...	...	...	167	207

Ahmedabad School Return—continued.

Class	Expenditure—*continued.* Scholarships. 1855-56.	1865-66.	1877-78.	Total. 1855-56.	1865-66.	1877-78.	Cost to Government. 1855-56.	1865-66.	1877-78.	Local Cess. 1855-56.	1865-66.	1877-78.	Other Funds. 1855-56.	1865-66.	1877-78.	Total. 1855-56.	1865-66.	1877-78.
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Government.																		
High school	...	60	78	476	1298	1356	470	722	796	...	...	78	6	576	482	476	1298	1356
Branch school	...	...	23	...	272	617	...	61	234	...	9	23	...	202	360	...	272	617
Anglo vernacular school ...	...	...	10	...	658	494	...	332	137	...	74	10	...	252	347	...	658	494
Vernacular school for ... Boys ...	...	...	...	259	2121	5068	213	952	1419	...	320	2869	46	849	780	259	2121	5068
Vernacular school for ... Girls ...	...	...	...	...		397	...		...	...		397	...					397
Training school ... Men ...	...	373	69	10	803	898	10	712	828	...	68	69	...	23	1	10	803	898
Training school ... Women ...	...	...	75	...	...	456	...	...	381	...	...	75	...	...	...	...	...	456
Special institution ... Gujarát Provincial College.	...	...	...	...	562	...	...	165	...	...	...	...	...	397	...	...	562	...
Government Aided.																		
English school	...	...	...	...	...	283	...	...	111	...	...	...	...	...	172	...	...	283
Anglo-vernacular school ...	...	...	...	...	...	174	...	...	81	...	...	...	...	...	93	...	...	174
Vernacular school for ... Boys ...	...	...	...	...	...	136	...	...	17	...	...	...	...	...	119	...	...	136
Vernacular school for ... Girls ...	...	...	...	...	...	195	...	...	10	...	...	...	...	...	185	...	...	195
Private Inspected.																		
Vernacular school for ... Boys ...	...	...	...	...	...	21	...	...	...	...	...	...	...	...	21	...	...	21
Vernacular school for ... Girls ...	...	...	...	...	128	...	...	...	...	...	...	...	...	128	...	...	128	...
Indigenous school receiving aid from Local Funds.	...	...	...	...	...	5	...	...	...	...	...	5	...	...	...	...	...	5
Total ...	..	433	255	745	5842	10,100	693	2944	4014	...	471	3526	52	2427	2560	745	5842	10,100

Chapter XI.
Instruction.

Town Education, 1877-1878.

A comparison of the present (1877-78) provision for teaching the district town and country population gives the following results.

In the town of Ahmedabad there were in 1877-78 twenty-three Government schools with, out of 2709 names on the rolls, an average attendance of 2049 pupils. Of these schools, one was a high school; three were Anglo-vernacular schools; ten were vernacular schools, nine for boys, one for girls; three Urdu; four night schools; and two were training colleges, one for men and the other for women. The average yearly cost per pupil in the high school was £9 2*s.* (Rs. 91) and in the training colleges £13 4*s.* 1½*d.* (Rs. 132-1 *anna*); while in the rest it varied from 8*s.* to £2 10*s.* (Rs. 4-Rs. 25). The table in the margin shows the number of pupils who, since 1863, have passed their University entrance test examination from the Ahmedabad high school.

Passed for the University, 1863-1878.

Government High School.

Year.	Pupils.	Year.	Pupils.
1863 ...	2	1871 ...	11
1864 ...	3	1872 ...	8
1865 ...	2	1873 ...	15
1866 ...	5	1874 ...	8
1867 ...	9	1875 ...	10
1868 ...	12	1876 ...	2
1869 ...	6	1877 ...	4
1870 ...	4	1878 ...	8

Private Schools.

Year.	Pupils.	Year.	Pupils.
1871 ...	4	1875 ...	8
1872 ...	8	1876 ...	...
1873 ...	1	1877 ...	1
1874 ...	3	1878 ...	2

In addition to the Government schools there were in 1877-78 six private schools, one of which was a high school, one an Anglo-vernacular school, two vernacular schools for boys, and two vernacular schools for girls. The average attendance, out of 829 names on the rolls, was returned at 545 or 0·46 per cent of the total population of the city. The table given above shows the number of pupils that passed their University entrance test examination from private schools.

In the town of Dholka there were, in the year 1877-78, five Government schools with, out of a roll call of 448 names, an average attendance of 271 pupils or 0·23 per cent of the total population of the town. Of these one was an English school; one an Urdu school; and three were Gujaráti schools, two for boys and one for girls. The average yearly cost per pupil in the English school was £5 (Rs. 50), in the Urdu school £1 (Rs. 10), in the girls' school 15*s.* 6*d.* (Rs. 7-12 *as.*), while in the rest it varied from 16*s.* to £1 (Rs. 8-Rs. 10).

In the town of Viramgám there were in 1877-78 five Government schools with, out of 415 names on the rolls, an average attendance of 283 pupils. Of these one was an English school; one an Urdu school, and three Gujaráti schools, two for boys and one for girls. The average yearly cost in the English school was £4 3*s.* (Rs. 41-8 *as.*), in the Urdu school 14*s.* 6*d.* (Rs. 7-4 *as.*), in the girls' school, £1 2*s.* (Rs. 11), and in the rest it varied from 16*s.* to £1 6*s.* (Rs. 8-Rs. 13).

In the town of Dholera there were, in 1877-78, three Government vernacular schools, two for boys and one for girls, with, out of 565 names on the rolls, an average attendance of 335 pupils. The average yearly cost was 10*s.* (Rs. 5) in the former and 16*s.* (Rs. 8) in the latter.

Chapter XI. Instruction.

Village Education.

Exclusive of the four towns of Ahmedabad, Dholka, Viramgám, and Dholera, the district of Ahmedabad was, in 1877-78, provided with 129 schools or on an average one school for every 6·43 inhabited villages. The following statement shows the distribution of these schools by sub-divisions:

Ahmedabad Village Schools, 1878.

Sub divisions	Villages	Population	1877-78. Vernacular Schools		Sub-divisions	Villages	Population	1877-78 Vernacular Schools	
			Boys	Girls				Boys	Girls
Parántij ...	157	71,072	10	1	Dholka ..	117	113,375	24	1
Daskroi	119	130,610	37		Dhandhuka	138	124,860	12	3
Viramgám .	140	128,044	20	1	Gogha	58	33,829	3	...
Sánand ..	82	73,229	16	1					

Before the establishment of Government village schools such children as got any education generally went to private schools kept by Bráhmans.[1] The pupils were generally Bráhmans and Vániás. Very few of the other classes learned to read or write. They made (1827) their money calculations by small stones and bits of earth and tiles which they passed from side to side as the counting went on.[2] Now (1878) only about one-half of the pupils are Bráhmans and Vániás.[3]

Miscellaneous.

Details of the Gujarát College and of the Training Colleges are given in the account of the Ahmedabad city (p. 309). Besides the two Ahmedabad city libraries, of which particulars will be found at page 311, there were, in 1877-78, twelve reading rooms in different parts of the district.[4] The working of the Gujarát Vernacular Society, and the number and circulation of the Ahmedabad newspapers, have been noticed in the Ahmedabad city account (pp. 310-311). A committee called the 'Ahmedabad Association' was, in 1872, formed in Ahmedabad to represent to Government the wants of the people. This, like other Gujarát political associations, is at present inactive.

1 The details given in the Kaira Statistical Account (p. 133) of the mode of teaching in the old private schools apply to Ahmedabad.
2 Bom. Gov. Sel. X. 43 and XI. 45.
3 See above p. 211.
4 The twelve places are; Barvála, Dhandhuka, Dholera, Dholka, Gogha, Khárá-ghoda, Modása, Pátri, Ránpur, Sánand, Sarkhej, and Viramgám.

CHAPTER XII.

HEALTH.

Chapter XII.
Health.
Plague.
1618.

A DISEASE, in its chief features the same as the true plague or *pestis*,[1] has during historic times more than once visited Ahmedabad. Of three chief outbreaks, in 1618, from 1683 to 1689, and from 1812 to 1821, some details are available.[2]

The disease that raged in Ahmedabad in 1618 began in the Panjáb in 1611. It is called the plague, *wába* or *wába-o-tá'aun*, and the works of the Hindus are said to have no mention of such a disease. It was thought to be connected with the comet of 1612. From the Panjáb it spread through Lahore, through the Doab to Delhi, and north to Kashmir. No place in Hindustán was free from its ravages. Lulling at times,[3] it continued to lay waste the country for eight years. About the same time, in Kandahár the land was overrun by mice, and mice and plague seem to have had some close connexion. A mouse would rush out of its hole as

---

[1] Surgeon George Waters, one of the latest writers on the Mesopotamian plague, is satisfied that that disease is due to the breathing of air charged with highly concentrated malarial or marsh poison, and that, in outbreaks of the plague in the Persian Gulf, there are pestilential centres surrounded by concentric areas of malarious disease, becoming less and less serious towards the circumference of the infected circles. Three Years' Medical History of the Persian Gulf (1878), 48, 60, 61. This disease, Mr. Waters is satisfied, is not contagious beyond the limits within which the malaria is generated. He is of opinion that the disease described in the text is the same as the Mesopotamian plague; that it is an aggravated form of malarial and not of typhus fever; and that it cannot spread beyond the limits of the malarial atmosphere. Preface to Three Years' Medical History, and Letter dated April 19th, 1879.

[2] Plague is believed to have first appeared in the delta of the Nile near the sea in A.D. 542. Arab writers, one of whose earliest notices is, in 743, the death by plague of one of the Khalifahs, speak of the disease, both as *wába* and *tá'aun*. (Forbes' Indian Plague, 6 and 69.) Of Indian outbreaks it is, on the authority of Hecker, stated in Ranken's Pali Plague (54), that the great pestilence of the 14th century, the English 'black death,' depopulated India. But the Musalmán historians of that century make very little mention of plague. The only two references that have been traced are from Ibn Batuta, who (Elliot, III. 619) notices that Muhammad Tughlik's (1325-1351) army in Ma'bar mostly perished of pestilence, and that at the end of the century (1399), after Timur left, the districts through which he had passed were visited by pestilence. (Tárikh-i-Mubárak Sháhi: Elliot, IV. 36). In 1443, when in Málwa, the plague caused such loss of life in Sultán Ahmad I.'s army that, leaving many of the dead unburied, he retired to Gujarát. Ferishta calls this disease *tá'aun*, and speaks of it as very unusual in India. Colonel Briggs thought Ferishta must be wrong as there was no case of Egyptian plague in India. The famine of 1590 to 1594, was in 1595 followed by a kind of plague that besides hamlets and villages depopulated whole cities. (Lubdatu-i-Tawárikh: Elliot, VI. 193). Among well informed Gujarát Hindus there is said to be a memory of a great plague that came from Dwárka (Superintending Surgeon N. D. 248; 9th May 1837). Of its date nothing is known

[3] 'Now (March 1616) it has wholly subsided.' Wákiát-i-Jahángiri: Elliot, VI. 346.

Chapter XII.
Health.
Plague.

if mad, and striking itself against the doors and walls of the house, would die.[1] Then the plague was in the house. If the people at once fled they might be saved; if they stayed, the whole village was swept away. To touch the dead, or even his clothes, was death. Hindus suffered more than Musalmáns. In Lahore, ten or twenty people would die in one house, and the neighbours would fly. A cow feeding on grass, on which a plague patient had been washed, died, and dogs that ate the cow fell dead on the spot.[2] In 1618 the Emperor Jahángir congratulated himself that he had escaped the plague by coming to Ahmedabad.[3] But the plague came to Ahmedabad soon after the Emperor, and, at least among the Europeans, was most deadly.

1617-1618.

'An extreme burning and most grievous pestilence,' says Terry,[4] who as Sir Thomas Roe's chaplain was there for several months (January-November), 'attacked Ahmedabad. In nine days seven English died. None were ill more than twenty-four hours and most not more than twelve. The bodies of those that died were set all on fire by it so soon as they were visited, and dying, broad spots of a black and blue colour[5] appeared on their breasts, and their flesh was made so extreme hot by their most high distemper that we who survived could scarce endure to keep our hands upon it. Those who got well had many great blisters, filled with a thick watery substance, that arose upon many parts of our bodies which when they broke did even burn and corrode our skins as it ran down upon them.'

1683-1689.

For several years before 1689 the plague, *táun* and *wába*, was again in Ahmedabad, and lasted for seven or eight years. The visible marks were swellings as big as a grape or banána behind the ears, under the arms, and in the groin, and redness round the pupils of the eyes.[6]

1770.

During the eighteenth century, though none of the symptoms of the disease are described, there would seem to have been several

[1] Compare during the London plague, 'the very dismal running of distempered persons about the streets,' before (1st July 1665) the order issued shutting infected houses. Plague of London: Defoe's Works (1840), IX. 37, 157-160.

[2] Ikbál Náma-i-Jahángiri: Elliot, VI. 405-407. Of this same outbreak the Emperor Jahángir writes: 'It is said by old men and it is also clear from the histories of former times that this disease had never appeared before in this country. I asked the physicians and learned men what was the cause of it, as for two years there had been a want of rain and the country had suffered from famine. Some said it was due to the foulness of the air from drought and scarcity; others ascribed it to other causes. God knows, and we must patiently submit to his will.' Wakiát-i-Jahángiri in Elliot, VI. 346. This disease is called *wába* and is distinguished from cholera, *haiza*. (Ditto, note 1).

[3] Wákiát-i-Jahángiri in Elliot, VI. 357.

[4] Terry's Voyages, 227.

[5] Terry's mention of these plague-spots is important as it seems to confirm Dr. Forbes' view that the spots, said to have been absent in the nineteenth century plague outbreaks, may not have been absent only overlooked from the dark colour of most of the victims' skins. Indian Plague, 54.

[6] In 1689 this same plague broke out with great violence at Bijápur, 'all attacked with it gave up hope.' It had been in the Deccán for several years. (Muntakhabu-l-Lubáb: Elliot, VII. 337). This was the same outbreak that in 1684 near Goa attacked Sultán Mosam's army and carried off 500 men a day (Orme's Hist. Frag. 142); raged in Surat for six years (1684-1690) (Bombay Gazetteer, II. 91); reduced (1690) the Bombay garrison to 35 English soldiers (Bruce's Annals, III. 94); like a bubo was (1695) so violent that it not only took away all means of preparing for a good end, but in a few hours in Surat, Daman, Bassein, and Thána carried off whole city-fulls of people (Gemelli Careri in Churchill, IV. 190), and at Tátha in Sind (1696) killed 80,000 souls (Ham. New Ac. I. 123).

Chapter XII. Health. Plague.

outbreaks of a most deadly form of fever. In 1718, a year of famine, great numbers died of sickness.[1] In 1770,[2] another famine year, on account of the unwholesomeness of the atmosphere, thousands of people died of fever in two or three days so that no one could be found to bury them. Fearful disease is said to have accompanied the 1790 famine.

1812-1821.

The next outbreak was early in the present century. The famine of 1811 and 1812[3] was, at the close of 1812, followed in Cutch by an outbreak of pestilence so deadly, that it was said to have destroyed half the ryots in the country.[4] At the same time a 'contagion raged at Ahmedabad with a fury that can scarcely be believed.' Every house sickened, whole families were carried off, and many a funeral party coming back to the house of mourning found that, in their absence, another member of the family had sickened and died. So thinned were some castes that their women had to help to carry the dead. All the fuel was burned and though houses were pulled down to supply logs many bodies had to be left half consumed. Half of the people of Ahmedabad, perhaps about 50,000 souls, are said to have perished.[5] In Ahmedabad Musalmáns and Hindus suffered alike. But in other parts it was noticed that among Musalmáns the disease was less fatal. Of the symptoms of this sickness no details are recorded. But there seems every reason to suppose that it was the same disease that, lulling for two years, in May 1815, after one of the heaviest rainfalls on record,[6] broke out afresh with deadly force at Kantakot in east Cutch. In cases of this disease slight fever was followed by great weakness and weariness, and then swellings came in the groin and armpits suppurating in some cases and in others remaining hard lumps. Few stricken with the disease recovered. Most died between the third and ninth day. The disease seemed in the air; there was nothing to show that it had been brought from the outside, or was spread by the touch. It seemed to attack most fiercely the sluggish and vegetable eaters; Rajputs escaped where Bráhmans and Vánias rotted off; oil makers were believed to be safe.[7] From Kantákot it spread to other parts of Vágar causing much loss of life in the early months of 1816. In May 1816, it crossed to Morvi in Káthiáwár, came

Course

---

[1] Etheridge, Bombay Famines, 40.

[2] Etheridge, Bombay Famines, 41.

[3] Details are given, p. 59.

[4] Bom. Gov. Sel. XV. 131. What must have strengthened, if it did not give rise to, this plague in Cutch was overcrowding. For some years past (1809-1812) disorders had been so great that the people fled from the villages and sought shelter in the towns. Bom. Gov. Sel. XV. 132.

[5] Trans. Bom. Lit. Soc. I. 326-327. Capt. Rivett-Carnac gives 100,000 as the estimated number of deaths. But (see p. 293) the whole city population can hardly have been more than 100,000.

[6] In 1814 the rains were so heavy that in the south-west of Pálanpur the Rupen carried away the Kanságar or ten mile lake that had safely dammed its waters since 1090. Rás Mála, I. 105.

[7] In Bhuj, care was taken that no one should come in from the affected districts. One man died, those with him were turned out, and the house smoked with brimstone and unwashed. Dr. McAdam, Anjár, Cutch, 6th November 1816. Bom. Med. Trans. I 183-189.

Chapter XII.
Health.
Plague.
1812-1821.

back in August within ten miles of Bhuj, and at the same time raged in Rádhanpur and Sind. From Morvi, in 1817, it travelled to Dholera, brought, it was said, from Cutch either by traders or cotton-ginners.[1] At Dholera only three people were attacked; but all of them died. From Dholera it spread among the villages round finding its way to Dhandhuka. It kept on among the Ran border villages till the close of 1817. It then gradually lessened but did not cease, isolated cases happening in Gogha in 1818. It lurked in this way till, at Bariád about five miles west of Dholera, in April 1819 it burst out with fresh fury.[2] It raged there till June entirely destroying forty families. Early in June it passed to Rájka, about five miles west of Bariád, and carried off nearly all its people. During the rains, July-October, it spread over a wide tract carrying panic and certain death. At this stage it was equally deadly at several distant places at the same time. About the end of June it came to Limbdi, and here death was so sudden and certain, that after losing from 1500 to 2000 of their number, leaving a few to burn or bury the dead, the people fled. They gained little by their flight. So heavy were the rains that the country was under water, the raised village sites standing out like islands in a sea. In them there was much crowding and the disease burst out in several towns and villages both to the east and west of Limbdi. In the beginning of 1820 the utmost eastern limit was Limbdi, but before the end of the year (October 1820) the plague was in Rádhanpur.[3] In 1821 the disease ceased.

Causes.

Besides the dregs of famine several causes combined to make this outbreak specially deadly. The marshes at the top of the Gulf of Cambay were more than usually feverish;[4] the people were filthy, neither washing nor oiling, wearing immense quantities of clothes, the lower classes never changing them till they rotted off[5]; the towns were overcrowded, hemmed in by walls and thick hedges, filled with listless idlers, and crowded with diseased cattle.[6]

Within the limits where it began and smouldered for years the disease would seem to have attacked vegetable-eaters most severely; Bráhmans, Vániás, Sonis, Darjis, and Kanbis suffered most, while with few exceptions the flesh-eating classes escaped.[7] In Káthiáwár, where the disease seems to have been brought from the lowlands near the Ran, the Musalmán weavers of the Bohora sect were first attacked. In Sila, Dheds are noticed to have been almost untouched, and oilmen, though Dr. Whyte did not believe this, were said by the

---

[1] Dr. Gilder, Bom. Med. Trans. I. 190-199.
[2] Dr. Gilder, Feb. 1820.
[3] Mr. Orton.
[4] Dr. Gilder, Feb. 1820.
[5] Dr. Whyte, March 1820.
[6] Dr. Whyte, March 1820. Dr. Whyte wrote this of the people of Káthiáwár. Of the Dholera people Dr. Glen said: 'They are the dirtiest race I ever saw; they wear large quantities of clothes which are not changed till they drop off rotten with filth. The filth is engrained in their skins.' Quoted in Dr Forbes' Indian Plague, 46.
[7] Dr Gilder, Ahmedabad, February 1820.

Chapter XII.
Health.
Plague.
1812-1821.

people to have been marked sufferers.[1] Of the total mortality nothing is known. But the disease was admitted to be most deadly, and the cases of recovery to have been very few. Unlike most other outbreaks of the plague man alone seems to have suffered. A sickness among cattle is said to have followed the 1813 famine, and in 1815 and again in 1819 the crops of western Ahmedabad were destroyed by rats. But as far as has been traced rats were not, as they were in 1618 and again in 1837, supposed to have had any thing to do with the outbreak of the disease.

Symptoms.

The disease appeared under two main types, the knot, *gánth*, or bubo disease, and the spitting, *kokla*, or fever, *táv*, sickness. The bubo form began with great uneasiness; pains in the head and loins; then hard knotty and in some cases highly painful swellings of the throat, armpit, and groin glands, and, after four or five hours an attack of fever growing fiercer, with keen thirst, till death came, on the third day.[2] If the third day passed, though such cases were rare, the patient began to mend, the buboes suppurated, and the fever grew milder. After a fortnight strength began to come back. The fever or spitting form showed high fever, with burning and racking pains about the heart, the skin as hot as fire; hiccough; deep and hard breathing; a pricking as of pins over the whole body; pain in the chest, joints, and navel; delirium; great anxiety and thirst; spitting of clotted blood; breathing still harder; death on the second day.[3] This second form was the most fatal. The cases at the beginning of an outbreak were generally of this class, and were sometimes so extremely sudden that a person was struck down at once and died bleeding a little from the mouth. When buboes came and suppurated, accompanied by purging or sweating, there was hope for the patient, and sometimes when buboes came without fever there was little danger to life, and people went about their every-day duties.

Very catching within its home limits the lowlands to the south-east of the Ran, the disease was only slightly contagious in the more healthy parts of Káthiáwár,[4] and though trade was in no way interfered with, it did not spread to any distant places.

Under these circumstances the doctors differed as to the name it should bear. Dr. Whyte held that it was the true plague, and

---

[1] 'I believe this was a fiction, and the people said it because I had pressed them to rub themselves with oil as a safeguard.' Dr. Whyte, March 1820. Still at Morvi one of the families that suffered most severely was an oilman's. Forbes' Indian Plague, 36, 37.

[2] Another account gives these details of the bubo form: 'Generally one bubo in the neck, armpit, breast, or groin; the tongue furred with white in the middle and fiery red at the edges, a curious muscular tremor, keen thirst, and much weakness.'

[3] Of a case of the fever and lung type Dr. Gilder gives these details: 'The patient a grown man, who had only been attacked that morning, had no marked symptoms of severe sickness. The heat of the body was not very high, the pulse not very fast, the bowels fairly regular, and the tongue not very foul, or feverish. He could walk about, and talk clearly. But he was most uneasy and would think of nothing but a pain in his chest; when asked he said his limbs pained him too, but it was his chest that distressed him. He had a slight cough and spitting of blood. Next day he was in high fever and died within 48 hours of his seizure; no buboes appeared.'

[4] Dr. Whyte found in Káthiáwár that the disease had come there from without; that it did not break out at once in different places, and that it was almost entirely confined to towns. Bom. Med. Trans, I. 73.

Dr. Gilder and Dr. Glen that it was a local fever made specially poisonous by unusual causes and attended by buboes.[1]

Chapter XII. Health.

Plague. 1812-1821. Safeguards.

To stop the spread of the disease, the Collector ordered all heads of villages to allow no one to come from infected villages, and that if any one harboured people from a diseased village he and his family were to be turned out.[2] Later on (January 1820) it was found necessary to keep people from going to diseased villages to their relations' funerals by ordering village officers to turn any one out who had visited an infected village.[3] Nothing was done to stop the general trade of the country. The chief medical measures were to keep villages clean, and where it could be managed, to allow a free current of air.[4] Personal cleanness and rubbing the skin with oil were advised.

Cures.

Attempts to cure met with little success. In Káthiáwár, village surgeon-barbers did nothing till the fifth day; then they applied stimulants to draw out the buboes.[5] In Dholera, Dr. Gilder (1820) found them using stimulants in the knot, and astringents in the fever and lung sickness; both, he thought, with an equally complete want of success. European skill failed to suggest any cure. Dr. Whyte could say nothing. He had the chance of treating only one or two patients, and as they died, the people would not let him see any more. In the bubo type Dr. Gilder thought that at an early stage emetics and bleeding would do much to stop the disease.

1836-1838.

After 1821 about fifteen years passed without any rumour of plague. In 1836 news came from Páli, that a disease, in its leading features the same as the great Jháláwár sickness, was carrying off large numbers of people. To guard against infection the Collector established a quarantine outside of Ahmedabad city for all persons coming from Páli. No goods were allowed to enter the city from that quarter, and all letters were smoked with brimstone. Steps were also taken to clean and whitewash the town.[6] From Páli the disease, lasting till 1838 and causing a loss of about 60,000 lives,[7] spread widely, west to Jhálor and Jodhpur, north to Ajmir, and east to Meywád. It seems to have made no progress south to Gujarát. A cordon was drawn between Márwár and Gujarát, allowing merchandise, but preventing diseased people from passing.[8] How

---

[1] Dr. Gilder says, in western Ahmedabad it was typhus aggravated by local poisoning (February 1820); Dr. Glen, who saw only the close of the outbreak, says it rose out of local causes and was not contagious (Letter dated 25th October 1836); Dr. Whyte said, in Káthiáwár it was (1820) contagious in close walled and airless towns; it was not contagious in open villages (March 1820).

[2] Collector to Govt. 14th September 1819. In spite of the quarantine the disease broke out in Dhandhuka. Dr. Whyte in Bom. Med. Trans. I. 175.

[3] Diary of 1820, 139, 140.

[4] A curious case happened in Valanir in Káthiáwár; the Bohorás, after losing some of their number, of their own accord left the town and staying a week in a hill came back and no more fell sick. Dr. Whyte, March 1820.

[5] Dr. Whyte.

[6] Collector's Letter, 23rd September 1836.

[7] Forbes' Indian Plague, 39. This is a rough estimate.

[8] Mr. Prescott, Political Superintendent, Pálanpur, 15th December 1836.

Chapter XII. Health. Plague. 1836-1838.

long local precautions were kept on at Ahmedabad has not been traced.[1]

In its leading symptoms the Páli disease was almost the same as the Jháláwár plague of 1819.[2] It differed from the earlier outbreak in two respects; there was nothing in the general condition of the people to which the outbreak could be traced, and like the 1618 plague its appearance followed a fatal epidemic among rats. The years before 1836 had yielded good harvests: food was cheap, and the village of Taiváli, about fifteen miles south-east of Páli, where the disease first appeared and in a few weeks carried off 150 inhabitants, was clean and airy, tolerably rich, and without brushwood or rank vegetation.[3] Whatever the cause, 1837 would seem to have been a very unhealthy season in Central India. Parts of Jeypur and Rohilkand, where the Páli plague did not spread were visited by a deadly and infectious yellow fever.[4]

The other peculiarity of the Páli plague was that, as in the plague of 1618, men were believed to have caught the disease from rats. In Taiváli, where the plague first broke out, during the last fortnight in April all the rats died. They lay dead in streets, corners, and wall holes, and shortly after (May) men began to sicken. This connection with rats was not peculiar to Taiváli. Wherever men began to sicken rats had sickened before them, and so general was the belief that people fled from any house where a dead rat was found.[5]

Safeguards.

The medical officers who knew the Páli disease were of opinion that to prevent its spreading the best chance was to give good air and take away filth. The native practitioners after trying bleeding and other cures fled. The only European officer who wrote of cures would, except opening and maturing the gland swellings, treat it as other fevers.[6] The arrangements made by Sir Charles Metcalfe, in case the disease should pass into British territory, are worthy of record. As soon as a town became affected it was to be isolated and five separate places set apart in it. These were: a hospital for the affected; a depôt for the strongly suspected; a quarantine for new

---

[1] In April 1837 an alarm of plague was raised in Lunávada in the Rewa Kántha. But medical inquiry seemed to show that the case was nothing more than severe fever with swelling and ulceration of the throat. Mr. Baynes, 1st April 1837; Surgeon Brickwell, 10th April 1837.

[2] Dr. Forbes says; In the mildest cases buboes appear with little constitutional disturbance, suppurate in due course, and the patient gets better: in the commonest cases there is a sudden fever and gland swelling; in the more severe, headache, giddiness, delirium, small or no buboes, hard cough, laboured breathing, death the fourth or sixth day; in the worst cases, no fever, cough and spitting of blood, clammy sweats, pressing thirsts, bloodcharged urine, blood oozing from the gums, heart tumultuous, exhaustion, death in 40 hours. Indian Plague, 10.

[3] Three stories were told of the origin of the plague. One that it had come in Egyptian goods from Surat; another that a Kabul trader had brought it; a third that it was the result of a Gosái's curse.

[4] Ranken's Páli Plague, 1. The rainfall was unusually heavy, but the medical writers do not seem to have thought that this went far to explain the outbreak.

[5] Dr. Whyte repeats this several times in his reports dated 29th January, 23rd March, and 3rd May 1837. The epidemic in Kumáon (1834-35) followed a great sickness among the rats. Forbes' Indian Plague, 35.

[6] Ranken's Páli Plague, 47-49.

comers; a depôt for infected goods, and a residence for expurgators. As the disease did not pass into British territories these arrangements were in no case necessary. The leading precautions taken were three: the blockade of all affected places by the chiefs of Jodhpur and Udepur; a frontier cordon; and a preventive line of troops round the most exposed British stations.[1] During the last fifty years no rumour of plague has disturbed Ahmedabad.

Diseases.

Of late years, perhaps from the spread of tillage, the district is said to have become much more healthy and remittent fever to be much milder than formerly. Of ordinary diseases ague is endemic, and remittent fever and skin diseases appear at all seasons of the year. In the autumn months, ague, dysentery, and diarrhœa, and in the cold weather bronchitis and pneumonia are the chief complaints. About the end of December smallpox, generally imported, makes its appearance among the poorer classes, but only in isolated cases, and rarely as an epidemic. The district is generally free from bad attacks of cholera. The cases that occur are chiefly brought from the outside, especially by pilgrims returning from fairs.

Hospitals.

In the year 1877 there were, besides the Hatising and Premábhái civil, police, and leper hospitals, nine dispensaries and one lunatic asylum, all established since 1859. Of these dispensaries seven are grant-in-aid; one, the Bechardás dispensary, is endowed, and one, the Khárághoda dispensary, is a Government institution. During the year 1877, exclusive of the leper hospital and the lunatic asylum, 89,221 persons were treated in these hospitals and dispensaries, 3407 of them in-door and 85,814 out-door patients. Except the Dholera

---

[1] Ranken's Páli Plague, 8, 9. Dr. Forbes was satisfied that the Ahmedabad or Jháláwár sickness of 1812 to 1821 and the Páli sickness of 1836 to 1838, were both cases of plague. He was inclined to hold that on each occasion the disease was developed on the spot, and was not brought from outside. The following shows shortly his views as to the nature of the plague and the best means for checking its spread should it again appear: 1, plague may sometimes appear without being brought, but this seldom happens and only in certain places; 2, its appearance and spread are due to diseased effluvia from living bodies whose power for evil is increased by some sickliness in the air; 3, those who catch the disease are in a state of health that helps the miasm to lay hold of them which it generally does through the air channels: 4, breathing the same air as the sick is, without touch, enough to give the disease, but without breathing the air, it is not proved that either touching the sick or their clothes gives the disease; 5, the number and fierceness of plague outbreaks depends on the condition of the people and the extent to which they are crowded; 6, the time between catching and showing the disease is usually about five and never more than ten days.

To check the spread of the disease Dr. Forbes would isolate large towns rather than stop traffic. Men coming from a diseased or suspected village should for ten days be kept apart and watched; merchandize he thought might in all cases pass. Air and room were the great wants; feeding, draining, and whitewashing, were of less importance. A single case of fever with bubo or carbuncle should be treated as plague. Villages where a case occurred should for some days, as far as possible, be emptied and the people lodged in separate huts in the fields. In towns, where the people could not well be spread, the greatest care should be taken to open streets and houses; and, large fires should be burned to rouse currents of air. In each town three buildings should be set apart as hospitals, one for patients, one for convalescents, and one for doubtful cases; and besides the hospitals there should be receiving houses where families, among whom a case of plague had occurred, should be fed and kept ten days while their houses were being aired and cleaned. Forbes' Indian Plague, 90-100.

Chapter XII. Health. Hospitals.

dispensary which is in a hired house, all these institutions are provided with separate buildings. The total amount spent in checking disease in 1877 was £5355 (Rs. 53,550); of this £3886 (Rs. 38,860) came from provincial revenues, £661 (Rs. 6610) from local and £808 (Rs. 8080) from municipal funds. The following working details are taken from the 1877 reports and from a paper contributed by the Huzur Deputy Collector, Mr. Fernandez.

The Hatising and Premábhái hospital at Ahmedabad was built in 1858 at a cost of £5200 (Rs. 52,000).[1] The hospital has room for ninety-two in-patients. The buildings are in a large walled enclosure almost in the centre of the town. They are one-storied raised on a five feet high plinth. The wards are high and airy. In separate buildings there are a women's ward and a ward for low caste patients. Of in-patients the total treated in 1877 numbered 2203. Of these 1707 were cured, 201 left, 124 died, and 171 remained under treatment at the end of the year. The total attendance of out-patients was 10,952 or an increase on the 1876 returns of more than 850. The average daily sick was of in-patients 147·6 and of out-patients 122·2. The chief forms of sickness were malarious fevers, rheumatism, syphilis, eye and lung affections, diarrhœa and dysentery, gonorrhœa, ulcers and skin diseases. The total number of patients treated in the police hospital at Ahmedabad was 258. Of these 252 were cured, five died, and one remained under treatment at the end of the year. The average of daily sick was 5·65. The chief forms of sickness were malarious fevers, rheumatism, and bowel and skin affections.

The leper hospital outside of the city between the A'stodia and the Ráypur gates, was opened in 1867. Besides room for fifty-six incurables and lepers, there are nine small-pox and ten cholera beds. This hospital, a branch of the Hatising and Premábhái hospital, was built at municipal cost.

The lunatic asylum was built by Government in 1863 at a cost of £1862 16*s.* (Rs. 18,628). In a retired spot outside of the Delhi gate on the Sháhi Bág road, it has about fourteen acres of land all tilled by the inmates. The building, cruciform with cells back to back, is enclosed by a ten feet high wall, the whole forming a rectangle 181½ feet by 158. The interior is arranged in four divisions, of which one is set apart for women. The asylum now (1877) contains twenty-three lunatics.

The Gogha civil hospital has its own building.

In 1877 the total treated, including seventy in-patients of whom three died, numbered 5196 or a falling off from the 1876 returns of nearly 900. The average daily sick was 47·5. The chief forms

[1] Including the cost of the building, the whole hospital funds amounted to £9600 (Rs 96,000). Of this £5500 (Rs 55,000) were given by the representatives of the late Hatising Kesrising, a wealthy opium merchant, £2000 (Rs. 20,000) by Ráo Bahádur Premabhái Hemábhái, the present Nagarseth, and £2100 (Rs 21 000) by Government.

of sickness were malarious fevers, eye and lung affections, bowel and skin diseases.

Dispensaries.

The Ráypur dispensary at Ahmedabad was opened in 1864. In 1872 the municipality supplied it with a handsome building costing £1950 (Rs. 19,500). In 1877, including 11 in-patients, the total treated was 18,428, or about 200 more than in the year before. The chief forms of sickness were malarious fevers, with eye, ear, lung and skin diseases, and syphilis. The Ahmedabad Bechardás dispensary, called after Ráo Bahádur Bechardás Ambaidás, C.S.I., who gave £1650 (Rs. 16,500) for its support, was opened in 1865. The building was erected by the municipality at a cost of £760 (Rs. 7600). In 1877, including in-patients, the total treated numbered 9943, or 229 less than in the year before. The chief diseases were malarious fevers, eye and skin affections, ulcers, and syphilis. The Sánand dispensary was opened in 1869. In 1877 including 147 in-patients, the total treated was 8702, or 3800 more than in the year before. The chief forms of sickness were fever, rheumatism, eye and skin affections, and syphilis. The Viramgám dispensary was opened in 1868. In 1877, including 243 in-patients, the total number treated was 9703 or 2200 more than in the year before. The chief diseases were malarious fevers, lung and skin affections, ulcers, and syphilis. The Dholka dispensary was opened in 1863. In 1877, including 121 in-patients, the total number treated was 7807, or about 300 less than in the year before. The chief diseases were fevers, rheumatism, and eye and skin affections. The Dhandhuka dispensary was opened in 1869. In 1877 including 106 in-patients, the total number treated was 4872 or 630 less than in the year before. The chief diseases were ulcers, skin affections, and malarious fevers. The Dholera dispensary in the Dhandhuka sub-division was opened in 1865. In 1877, including nineteen in-patients, the total number treated was 5367, or 268 more than in the year before. The chief diseases were skin affections, ulcers, malarious fevers, and syphilis. The Parántij dispensary was opened in 1869. In 1877, including 120 in-patients, the total number treated was 4659, or about 600 less than in the year before. The chief forms of sickness were malarious fevers, ulcers, and eye and skin affections. The Khárághoda dispensary in the Viramgám sub-division was opened in 1874. In 1877, including 12 in-patients, the total number treated was 1131, or about 400 more than in the year before. The chief diseases were malarious fevers and skin affections.

Vaccination.

In 1877-78 the work of vaccination was, under the supervision of the Deputy Sanitary Commissioner in eastern Gujarát, carried on by fourteen vaccinators with yearly salaries varying from £14 8*s.* (Rs. 144) to £28 16*s.* (Rs. 288). Of the operators nine were distributed over the rural parts of the district, two for each of the sub-divisions of Daskroi and Dhanduka, and one for each of the other five sub-divisions. Of town vaccinators there were five, one each in Viramgám, Dholka, and Dhandhuka, and two in Ahmedabad. The total number of operations was 27,204 besides 1499 re-vaccinations, compared with 29,003 primary vaccinations and no re-vaccinations in 1869-70.

Chapter XII. Health.

The following abstract shows the sex, religion, and age of the persons vaccinated:

Ahmedabad Vaccination Details, 1869-70 and 1877-78.

Year.	Persons Vaccinated.									
	Sex.		Religion.					Age		Total.
	Males	Females	Hindus.	Musalmáns	Pársis	Christians.	Others	Under one year.	Above one year.	
1869-70 ..	15,453	13,550	24,576	2771	19	30	1607	21,339	7664	29,003
1877-78	14,203	13,001	22,270	2907	18	21	1988	18,732	8472	27,204

The total cost of these operations was in 1877-78, £651 18*s.* (Rs. 6519), or about 5¾*d.* (3⅚ *as.*) for each successful case. The entire charge was made up of the following items: Supervision and inspection £270 2*s.* (Rs. 2701), establishment £368 2*s.* (Rs. 3681), and contingencies £13 14*s.* (Rs. 137). Of these the supervising and inspecting charges and 10*s.* (Rs. 5) on account of contingencies were wholly met from Government provincial funds. Of the remainder the expense of £237 10*s.* (Rs. 2375) on account of rural vaccinators was borne by the local funds of the different subdivisions, while the Viramgám, Dholka, and Dhandhuka municipalities and the city of Ahmedabad paid the sum of £143 16*s.* (Rs. 1438) for the services of the vaccinators employed by them.

Cattle Disease

Among cattle a severe form of pustular disease like smallpox is every year more or less common in the months of June and October, that is, immediately before and after the rains. In 1863 the outbreak was more than usually fatal. In 1870 apoplexy, *bharmia,* raged in the district, the cattle falling down and dying in a few hours. Other forms of cattle disease, are rinderpest, *balia* or *sitla,* literally smallpox. The symptoms are purging and refusal of food and water for some days. The attack continues for about a week. Mouth and hoof disease, *movása* or *Sharva*; the symptoms are foaming at the mouth, refusal of food and water, and the formation of small worms in the hoofs. The disease lasts for four or five days. Inflammation of the chest, *malvi dukh,* the animal has a severe cough, will not eat, gets weaker gradually, and dies in two or three months. Inflammation of the throat, *hyajari,* a rare disease, the animal cannot eat or drink, and in a few days dies from exhaustion. Horn disease, *kamodi,* is not always fatal. *Valo,* seldom fatal, is caused by swallowing some insect in the grass; the symptoms are foaming at the mouth and refusal of food and water for two or three days. The last is boils on the tongue, *sardo,* a tedious but not dangerous disease.

Births and Deaths.

The total number of deaths in the seven years ending 1878, as shown in the Sanitary Commissioner's Annual Reports, is 156,834 or an average yearly mortality of 22,405, or assuming the figures of the census of 1872 as a basis, of 2·70 per cent of the total population. Of the average number of deaths 15,423 or 68·81 per

cent were returned as due to fevers; 1293 or 5·77 per cent to bowel complaints; 1003, or 4·48 per cent to cholera; 379 or 1·69 per cent to small-pox; and 4030 or 17·99 per cent to miscellaneous diseases. Deaths from violence or accidents averaged 277, or 1·24 per cent of the average mortality of the district. During the same period the number of births is returned at 112,436 souls, of whom 60,292 are entered as male and 52,144 as female children, or an average yearly birth-rate of 16,062 souls; or, on the basis of the census figures, a birth-rate of 1·94 per cent of the entire population of the district.[1]

---

1 The figures are incorrect, for while the population of the district is increasing the returns show a birth-rate less by 6343 than the death-rate. The explanation probably is that nearly all the deaths and not nearly all of the births are recorded.

CHAPTER XIII.

SUB-DIVISIONS.

Chapter XIII.
Sub-divisions.
PARA'NTIJ.

Para'ntij Sub-division. Including on the east the isolated Modása petty-division, Parántij in the extreme north-east of Ahmedabad, and cut off from the rest of the district by a fifteen-mile-belt of Mahi Kántha land, is bounded on the north by Mahi Kántha, on the east by Reva Kántha, on the south by Mahi Kántha, and on the west by Baroda territory. Its area is 443 square miles; its population, according to the 1872 census, was 106,934 souls, or 241 to the square mile; and in 1877 its realizable land revenue was £13,845 (Rs. 1,38,450.)

Area.

Of its 443 square miles, 137 are occupied by alienated and *mehvási* villages. The rest, according to the revenue survey returns, contains 195,619 acres, or 69 per cent, of occupied land; 92,953 acres, or 33 per cent, of arable waste; 59,474 acres, or 21 per cent, of unarable waste; and 43,192 acres, or 15 per cent, of village sites, roads, ponds, and river-beds. From the 195,619 arable acres, 22,669, the area of alienated land in Government villages, has to be taken. Of the balance 172,950 acres of arable Government land, 82,169 acres, or 47·51 per cent, were in the year 1877-78 under tillage.

Aspect.

From the north-east, lines of rocky, rather bare hills, gradually sink west and south into a plain, at first thinly wooded and poorly tilled, then with deeper soil, finer trees and better tillage, till in the extreme west along the Sábarmati bank the surface is broken by ridges and ravines.

Climate.

Once sickly and feverish, since the brushwood has been cleared, the climate has improved, and during the hot season it is now the healthiest and coolest part of the district.

Water.

Besides wells of sweet and good water specially abundant in the Bokh hollow, Parántij has many rivers, the Sábarmati, Háthmati, Khári, Meshvo, Vátrak, and Májham flowing throughout the year. It is also crossed by the Háthmati canal. From its backward state and its thriftless people the Parántij stores of water are little used. In 1877 the water-supply figures were 36 wells with steps, 1196 wells without steps, 292 water lifts, *dhekudis*, 314 ponds or reservoirs, and 81 rivers, streams, and springs.

Soil.

The prevailing soil is light, *gorát*, towards the east somewhat red and gritty. In south Modása are stretches of black soil worked into rice-beds in the low-lying parts of Parántij. In the east the staple crop is maize, and in the west millet. Garden tillage is neglected.

Chapter XIII.
Sub-divisions.
PARA'NTIJ.
Holdings.

In 1861-62, the year of settlement, 10,035 holdings, *khátás*, were recorded with an average area of $9\frac{11}{40}$ acres and an average rental of 17*s.* $4\frac{1}{2}$*d.* (Rs. 8-11-0). Equally divided among the agricultural population, these holdings would, for each person, represent an allotment of $2\frac{36}{40}$ acres, at a yearly rent of 5*s.* 5*d.* (Rs. 2-11-4). If distributed among the whole population of the sub-division, the share to each would amount to $1\frac{29}{40}$ acres, and the incidence of the land tax to 3*s.* 3*d.* (Rs. 1-10).

Rental, 1861-62.

The following statement shows the arable area in 112 Government villages, and the rates fixed in 1861 for thirty years:

Parántij Rent Roll, 1861-62.

Tenure.	Arable Land.	Occupied.			Unoccupied.			Total.		
		Acres.	Rupee Assessment.	Average acre rate.	Acres.	Rupee Assessment.	Average acre rate.	Acres.	Rupee Assessment.	Average acre rate.
			Rs.	Rs. a. p.		Rs.	Rs. a. p.		Rs.	Rs. a. p.
Government.	Dry crop ...	67,746	77,937	1 2 5	58,755	54,758	0 14 11	126,501	1,32,695	1 0 9
	Garden ..	2214	3103	1 6 5	11	13	1 3 3	2225	3116	1 6 5
	Rice	324	686	2 1 11	708	1350	1 14 7	1031	2036	1 15 7
	Total ..	70,284	81,726	1 2 7	59,474	56,121	0 15 1	129,757	1,37,847	1 0 11
Alienated.	Dry crop ..	21,122	33,725	1 9 7	...	...	...	21,122	33,725	1 9 7
	Garden ...	1367	7860	6 0 2	...	...	...	1307	7860	6 0 2
	Rice	239	276	1 2 5	...	...	...	239	276	1 2 5
	Total ...	22,668	41,861	1 13 7	...	...	...	22,6[illegible]	41,861	1 13 7
Total.	Dry crop ...	88,868	1,11,662	1 4 1	58,755	54,758	0 14 11	147,[illegible]	1,66,[illegible]	[illegible] 2 0
	Garden ...	3521	10,963	3 1 9	11	13	1 3 3	3532	10,97[illegible]	3 1 8
	Rice	563	962	1 11 4	708	1350	1 14 7	1270	2312	1 13 1
	Grand Total	92,952	1,23,587	1 5 3	59,474	56,121	0 15 1	152,425	1,79,708	1 2 10

	Rs. a. p.	£. s. d.
Assessment on Government and alienated land.	1,79,707 2 9	17,970 14 4
Deduct—Alienations	41,860 4 9	4,186 0 7
Remains	1,37,846 14 0	13,784 13 9
Add—Quit-rents	5428 7 0	542 16 $10\frac{1}{2}$
Grazing farms and river-bed tillage...	6840 0 3	684 0 $\frac{1}{4}$
Total revenue ...	1,50,115 5 3	15,011 10 $7\frac{3}{4}$

Stock, 1876-77.

The 1872 population, 106,934 souls, lodged in 29,175 houses, were, in 1876-77, supplied with 1239 wells and 314 ponds, and owned 14,734 ploughs, 2771 carts, 35,065 oxen, 27,755 cows, 25,018 buffaloes, 1313 horses, 14,828 sheep and goats, 1777 asses, and 132 camels.

Produce, 1877-78.

In 1877-78, of 82,169 acres, the total area of cultivated land, 10,143 acres, or 12·34 per cent, were fallow or under grass. Of the remaining 72,026 acres, 3441 acres were twice cropped. Of the 75,467 acres under actual cultivation, grain crops occupied 53,205 acres, or 70·60 per cent, 29,924 of them under *bájri*, Penicillaria spicata; 8405 under *juvár* Sorghum vulgare; 5085

Chapter XIII.
Sub-divisions.
PARA'NTIJ.

under *kodra*, Paspalum scrobiculatum ; 3933 under *maize, makái*, Zea mays ; 2195, under wheat, *ghau*, Triticum æstivum ; 398 under barley, *jav*, Hordeum hexastichon ; 1093 under paddy and rice, *dángar*, Oryza sativa ; 2172 under miscellaneous cereals. Pulses occupied 19,458 acres, or 25·78 per cent, of which 3025 acres were under *múg*, Phaseolus radiatus ; 1076 under gram, *chana*, Cicer arietinum ; 315 under *adad*, Phaseolus mungo ; and 15,042 under miscellaneous crops, comprising *guvár*, Cyamopsis psoralioides ; *math*, Phaseolus aconitifolius ; *vál*, Dolichos lablab ; and *chola*, Vigna catiang. Oil seeds occupied 2572 acres, or 3·40 per cent, of which 2466 were under *tal*, Sesamum indicum ; and 106 under other oil-seeds. Fibres occupied 42 acres, or ·05 per cent, of which 8 acres were under cotton, *kapás*, Gossypium herbaceum ; and 34 under hemp, *san*, Crotalaria juncea. Miscellaneous crops occupied 190 acres, or ·25 per cent, of which 31 acres were under sugarcane, *serdi*, Saccharum officinarum ; 62 under safflower, *kasumba*, Carthamus tinctorius ; and 97 under miscellaneous vegetables and fruits.

People, 1872.

The 1872 census returns show of a total population of 106,934 souls, 98,689, or 92·28 per cent, Hindus ; 8244, or 7·71 per cent, Musalmáns ; and one Christian. Statistics specially prepared from the enumerators' forms give the following caste details : 4769 Bráhmans, 3 Brahma-Ks Khatris, writers, 5297 Vániás, 2624 Shrávaks, traders and merchants, 19,438 Kanbis, 478 Rajputs, 341 Sathvárás, 41 Káchhiás, 170 Mális, and 41,571 Kolis, cultivators, 408 Bhávsárs, calico-printers, 198 Chhipás, calenders, 220 Khatris, weavers, 233 Ghánchis, oil-pressers, 476 Sonis, gold and silver smiths, 1263 Suthárs, carpenters, 87 Kansárás, brass and copper smiths, 1252 Luhárs, or blacksmiths, 938 Darjis, tailors, 182 Kadiás, brick-layers, 774 Bháts, bards, 1961 Kumbhárs, potters, 1226 Hajáms, barbers, 124 Dhobhis, washermen, 2582 Bharváds and Rabáris, herdsmen and shepherds, 88 Bhois, fishers and labourers, 17 Vanjárás, carriers, 32 Maráthás, labourers, 338 Vághris, fowlers, hunters and beggars, 1453 Rávaliás, cotton tapemakers, 42 Kaláls, liquorsellers, 38 Bajániás, acrobats, 103 Thoris, players, 200 Bhils, cultivators, 592 Mochis, shoemakers, 1261 Chámadiás, tanners, 427 Garudás, 4215 Dheds, and 1221 Bhangiás, depressed classes, and 506 religious beggars. As regards occupation the same return arranges the whole population under the seven following heads : i. Employed under Government or municipal or other local authorities, 1082. ii. Professional persons, 461. iii. In service or performing personal offices, 1402. iv. Engaged in agriculture and with animals (*a*) cultivators 23,739 ; (*b*) labourers 2192 ; total 25,931. v. Engaged in commerce and trade, 2736. vi. Employed in mechanical arts, manufactures and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 20,031. vii. Miscellaneous persons not classed otherwise (*a*) women 14,755 and children 38,732 ; in all 53,487, and (*b*) miscellaneous persons, 1804 ; total, 55,291.

DASKROI.

Daskroi Sub-division. The Daskroi, or head-quarter sub-division, stretches round Ahmedabad about thirty miles north and south and twenty east and west. It is bounded on the north by Baroda territory, on the east by Mahi Káutha, on the south by

Chapter XIII.
Sub-divisions.
DASKROI.

Kaira, and on the west by Sánand and by Baroda territory. Its area is 351 square miles; its population, according to the 1872 census, was 249,366 souls,[1] or 710 to the square mile; and in 1877 its realizable land revenue was £35,940 (Rs. 3,59,400).

Area.

Of its 351 square miles, 34 are occupied by alienated villages. The rest, according to the revenue survey return, contains 202,933 acres, or 90 per cent, of occupied land; 135,941 acres, or 60 per cent, of arable waste; 36,002 acres, or 16 per cent, of unarable waste; and 30,990 acres, or 14 per cent, of village sites, roads, ponds and rivers. From the 202,933 arable acres, 55,232, the area of alienated land in Government villages, has to be taken. Of the balance 147,701 acres of arable Government land, 98,023 acres, or 66·36 per cent, were in the year 1877-78 under tillage.

Aspect.

The sub-division, except to the east and south, where there are a few sand-hills and gentle swellings, is flat. East of the Sábarmati it is fairly well wooded and park-like; but on the west it is open and rather bare of trees.

Climate.

Out of reach of the sea-breeze, and with a light sandy soil, the climate is hot and dry. During the eight years ending 1860, the average rainfall was thirty-five inches.

Water.

The sub-division is crossed by the Sábarmati, Khári and Meshvo. But, except in the extreme south, their waters are little used for irrigation. In 1877 the water-supply figures were 64 wells with steps, 4019 wells without steps, 47 water-lifts, *dhekudis*, 634 ponds or reservoirs, and 4 rivers, streams, and springs.

Soil.

Most of the soil is light, *gorát*, varying from mere sand to the richest loam. But with good tillage and water, the sandiest fields yield rich crops. The soil of the low-lying parts of the southern villages is black and much used for rice. In the loops of the Sábarmati are patches of alluvial, *bhátha*, land yielding the finest sugarcane and tobacco. The Daskroi staple crops are millet, *bájri*, Indian millet, *juvár*, and rice.

Holdings.

In 1860-61, the year of settlement, 17,476 holdings, *khátás*, were recorded with an average area of $7\frac{31}{40}$ acres, and an average rental of £1 11*s*. 3*d*. (Rs. 15-9-11). Equally divided among the agricultural population, these holdings would, for each person, represent an allotment of $2\frac{14}{40}$ acres, at a yearly rent of 9*s*. 5*d*. (Rs. 4-11-2). If distributed among the whole population of the sub-division, the share to each would amount to $1\frac{15}{40}$ acres, and the incidence of the land-tax to 5*s*. 6½*d*. (Rs. 2-12-4).

Rental, 1860-61.

The following statement shows the arable area in 125 Government villages, and the rates fixed in 1860-61 for twenty-seven years:

---

[1] This total includes the population of the Ahmedabad city (118,756 souls).

Chapter XIII.
Sub-divisions.
DASKROI.

Daskroi Rent Roll, 1860-61.

Tenure.	Arable Land.	Occupied. Acres.	Occupied. Rupee Assessment.	Occupied. Average acre rate.	Unoccupied. Acres.	Unoccupied. Rupee Assessment.	Unoccupied. Average acre rate.	Total. Acres.	Total. Rupee Assessment.	Total. Average acre rate.
			Rs.	Rs. a. p		Rs.	Rs. a. p.		Rs.	Rs. a. p.
Government	Dry crop ...	64,967	1,40,791	2 2 8	29,528	54,885	1 13 8	94,495	1,95,676	2 1 2
	Garden ...	5183	31,578	6 1 6	1247	6768	6 10	6430	38,346	5 15 5
	Rice	10,559	61,197	5 12 9	5226	26,376	0 9	15,785	87,573	5 8 9
	Total ...	80,709	2,33,566	2 14 3	36,001	88,029	2 7 2	116,710	3,21,595	2 12 1
Alienated.	Dry crop ...	41,258	87,063	2 1 9	...	...	...	41,258	87,063	2 1 9
	Garden ...	3459	20,143	5 13 2	...	...	...	3459	20,143	5 13 2
	Rice	10,515	66,361	6 4 11	...	...	...	10,515	66,361	6 4 11
	Total ...	55,232	1,73,567	3 2 3	...	...	..	55,232	1,73,567	3 2 3
Total.	Dry crop ...	106,225	2,27,854	2 2 4	29,528	54,885	1 13 8	135,753	2,82,739	2 1 4
	Garden ..	8642	51,721	5 15 9	1247	6768	5 6 10	9889	58,489	5 14 7
	Rice	21,074	1,27,558	6 0 10	5226	26,376	5 0 9	26,300	1,53,934	5 13 8
	Grand Total..	135,941	4,07,133	2 15 11	36,001	88,029	2 7 2	171,942	4,95,162	2 14 1

	Rs. a. p.	£. s. d.
Assessment on Government and alienated land.	4,95,161 12 9	49,516 3 7
Deduct—Alienations	1,73,567 15 9	17,356 15 11½
Remains	3,21,593 13 0	32,159 7 7½
Add—Quit-rents	39,429 13 3	3942 19 7¾
Grazing farms and river-bed tillage...	23,418 12 0	2341 17 6
Total revenue ...	3,84,442 6 3	38,444 4 9¼

Stock, 1876 77.

The 1872 population, 249,366 souls, lodged in 40,870 houses, were, in 1876-77, supplied with 4083 wells and 634 ponds, and owned 10,338 ploughs, 2823 carts, 23,487 oxen, 10,616 cows, 27,926 buffaloes, 627 horses, 14,702 sheep and goats, 2050 asses, and 66 camels.

Produce, 1877-78.

In 1877-78, of 98,023 acres, the total area of cultivated land, 4956 acres, or 5·05 per cent, were fallow, or under grass. Of the remaining 93,067 acres, 3185 acres were twice cropped. Of the 96,252 acres under actual cultivation, grain crops occupied 86,306 acres, or 89·66 per cent, 43,299 of them under *bájri*, Penicillaria spicata; 26,887 under *juvár*, Sorghum vulgare; 7409 under paddy and rice, *dángar*, Oryza sativa; 5701 under barley, *jav*, Hordeum hexastichon; 1369 under *kodra*, Paspalum scrobiculatum; 755 under wheat, *ghau*, Triticum æstivum; and 886 under miscellaneous cereals. Pulses occupied 2936 acres, or 3·05 per cent, of which 538 acres were under gram, *chana*, Cicer arietinum; 561 under *mag*, Phaseolus radiatus; 86 under *adad*, Phaseolus mungo; 35 under *tuver*, Cajanus indicus; and 1716 under miscellaneous crops, comprising *guvár*, Cyamopsis psoralioides; *math*, Phaseolus aconitifolius; *vál*, Dolichos lablab; and *chola*, Vigna catiang. Oil-seeds occupied 3177 acres, or 3·30 per cent, of which 122 were under *tal*, Sesamum indicum; and 3055 under other oil-seeds. Fibres occupied 1366 acres, or 1·42

Chapter XIII.
Sub-divisions.
DASKROI.

per cent, of which 1344 acres were under cotton, *kapás*, Gossypium herbaceum; and 22 under hemp, *san*, Crotalaria juncea. Miscellaneous crops occupied 2467 acres, or 2·56 per cent, of which 875 acres were under sugarcane, *serdi*, Saccharum officinarum; 208 under indigo, *gali*, Indigofera tinctoria; 76 under safflower, *kasumba*, Carthamus tinctorius; 124 under tobacco, *tambáku*, Nicotiana tabacum; and 1184 under miscellaneous vegetables and fruits.

People, 1872.

The 1872 census returns show of a total population of 130,610 souls, 125,391, or 96 per cent, Hindus; 4947, or 3·78 per cent, Musalmáns; and 272, or ·20 per cent, Christians. Statistics specially prepared from the enumerators' forms give the following caste details: 6756 Bráhmans, 1 Brahma-Kshatri, 1 Parbhu, writers, 3026 Vániás, 421 Luvánás, 3703 Shrávaks, traders and merchants, 28,910 Kanbis, 5104 Rajputs, 15 Káchhiás, 158 Mális, 39,593 Kolis, cultivators, 381 Bhávsárs, calico-printers, 206 Sonis, gold and silver smiths, 1557 Suthárs, carpenters, 1386 Luhárs, blacksmiths, 538 Darjis, tailors, 12 Kadiás, bricklayers, 273 Ghánchis, oil-pressers, 595 Bháts, 55 Chárans, bards and genealogists, 2689 Khumbárs, potters, 2514 Hajáms, barbers, 45 Dhobhis, washermen, 3698 Bharváds, and Rabáris, herdsmen and shepherds, 177 Golás, rice-pounders, 51 Maráthás, labourers, 1749 Bhois, fishers and labourers, 2822 Vághris, fowlers, hunters and beggars, 2057 Rávaliás, cotton-tape makers, and beggars, 166 Ods, diggers, 24 Kámaliás, makers of blankets, *kámli*, 776 Márvádis, labourers, 111 Bajániás, acrobats, 992 Mochis, shoemakers; 2289 Chámadiás, tanners, 562 Garudás, 8863 Dheds, 2128 Bhangiás, depressed classes, and 987 religious beggars. As regards occupation the same return arranges the whole population under the seven following heads: i. Employed under Government or municipal or other local authorities, 581. ii. Professional persons, 884. iii. In service or performing personal offices, 1772. iv. Engaged in agriculture and with animals, (*a*) cultivators 30,810; (*b*) labourers 2838; total 33,648. v. Engaged in commerce and trade, 1209. vi. Employed in mechanical arts, manufactures and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 19,979. vii. Miscellaneous persons not classed otherwise, (*a*) women 33,095 and children 36,837, in all 69,932; and (*b*) miscellaneous persons, 2605; total 72,537.

VIRAMGA'M.

Viramga'm Sub-division. Viramgám is bounded on the north by Baroda territory, on the east by Baroda territory and Sánand, on the south by the Nal, and on the west partly by Káthiáwár and partly by Rádhanpur. Its area is 679 square miles; its population, according to the 1872 census return, was 128,044 souls, or 188 to the square mile; and in 1877 its realizable land revenue was £20,014 (Rs. 2,00,140.)

Area.

Of its 679 square miles, 363 are occupied by the lands of alienated and *tálukdári* villages. The rest, according to the revenue survey returns, contains 202,352 acres, or 47 per cent, of occupied land; 102,618 acres, or 24 per cent, of arable waste; 63,360 acres, or 15 per cent, of unarable waste; and 36,374 acres, or 8 per cent, of village sites, roads, ponds and rivers. From 202,352 arable acres, 29,629, the area of alienated land in Government villages, has to be

Chapter XIII.
Sub-divisions.
VIRAMGA'M.

taken. Of the balance 172,723 acres of arable Government land, 137,629 acres, or 79·68 per cent, were in the year 1877-78 under cultivation.

Aspect.

Except in the north, where the surface is broken by rolling sand hills, with in places patches of brushwood, Viramgám is a plain of thinly wooded light soil in the east, and to the west and south of open black soil ending in the salt level of the Ran.

Climate.

In the hot season Viramgám is one of the hottest parts of Ahmedabad.

Water.

Without rivers, Viramgám is well supplied with ponds and reservoirs. In light soils sweet water is found near the surface. In black, though sufficient in quantity, it is generally brackish. Except rice-lands watered from ponds, the district has little garden cultivation. In 1877 the water-supply figures were 3 wells with steps, 806 wells without steps, 1423 ponds or reservoirs, and 4 rivers, streams, and springs.

Soil.

In the north-east about one-third of the area is light, *gorát*, soil yielding millet and pulse, the rest, except chance light patches is black, yielding cotton, wheat, millet, and rice.

Holdings.

In 1858-59, the year of settlement, 4435 holdings, *khátás*, were recorded with an average area of $23\frac{6}{40}$ acres and an average rental of £1 17*s.* $3\frac{1}{2}$*d.* (Rs. 18-10-3). Equally divided among the agricultural population, these holdings would, for each person, represent an allotment of $4\frac{35}{40}$ acres, at a yearly rent of 7*s.* 10*d.* (Rs. 3-14-9). If distributed among the whole population of the sub-division, the share per head would be $2\frac{6}{40}$ acres, and the incidence of the land tax 3*s.* $5\frac{1}{2}$*d.* (Rs. 1-11-8).

Rental, 1858-59.

The following statement shows the arable area in sixty-six Government villages, and the rates fixed in 1858-59 for thirty years.

Viramgám Rent Roll, 1858-59.

Tenure.	Arable Land.	Occupied.			Unoccupied.			Total.		
		Acres.	Rupee Assessment.	Average acre rate.	Acres.	Rupee Assessment.	Average acre rate.	Acres.	Rupee Assessment.	Average acre rate.
			Rs.	Rs. a. p.		Rs.	Rs. a. p.		Rs.	Rs. a p.
Government.	Dry crop ...	71,771	74,516	1 0 7	60,569	61,669	1 0 3	132,340	1,36,185	1 0 5
	Garden ...	382	434	1 2 2	...	...	...	382	434	1 2 2
	Rice	836	2430	2 14 6	2791	6850	2 7 3	3627	9280	2 8 11
	Total ...	72,989	77,380	1 0 11	63,360	68,519	1 1 3	136,349	1,45,899	1 1 1
Alienated.	Dry crop ...	28,817	28,802	1 0 0	...	...	...	28,817	28,802	1 0 0
	Garden ...	...	...	...	...	...	...	...	...	...
	Rice	813	2459	3 0 4	...	...	...	813	2459	3 0 4
	Total ...	29,630	31,261	1 0 11	...	...	...	29,630	31,261	1 0 11
Total.	Dry crop ..	100,588	1,03,318	1 0 5	60,569	61,669	1 0 3	161,157	1,64,987	1 0 4
	Garden ..	382	434	1 2 2	...	...	...	382	434	1 2 2
	Rice	1649	4889	2 15 5	2791	6850	2 7 3	4440	11,739	2 10 3
	Grand Total ...	102,619	1,08,641	1 0 11	63,360	68,519	1 1 3	165,979	1,77,160	1 1 1

	Rs.	a.	p.	£.	s.	d.
Assessment on Government and alienated land .	1,77,159	8	0	17,715	19	0
Deduct—Alienations	31,260	4	0	3126	0	6
Remains	1,45,899	4	0	14,589	18	6
Add—Quit-rents	5288	2	2	528	16	3¼
Grazing farms and river-bed tillage .	53,344	15	2	5334	9	10¾
Total revenue .	2,04,532	5	4	20,453	4	8

Stock, 1876-77.

The 1872 population, 128,044 souls, lodged in 49,404 houses, were, in 1876-77, supplied with 809 wells and 1423 ponds, and owned 11,426 ploughs, 4459 carts, 26,296 oxen, 14,900 cows, 26,256 buffaloes, 1171 horses, 14,717 sheep and goats, 1518 asses, and 195 camels.

Produce, 1877-78.

In 1877-78, of 249,569 acres, the total area of cultivated land, 59,332, or 23·77 per cent, were fallow, or under grass. Of the remaining 190,237 acres, 1046 were twice cropped. Of the 191,283 acres under actual cultivation, grain crops occupied 115,567 or 60·41 per cent, 54,802 of them under *juvár*, Sorghum vulgare; 28,514 under *bájri*, Penicillaria spicata; 24,425 under wheat, *ghau*, Triticum æstivum; 4133 under barley, *jav*, Hordeum hexastichon; 751 under *kodra*, Paspalum scrobiculatum; 413 under paddy and rice, *dángar*, Oryza sativa; and 2529 under miscellaneous cereals. Pulses occupied 11,431 acres, or 5·97 per cent, of which 2022 acres were under gram, *chana*, Cicer arietinum; 4425 under *mg*, Phaseolus radiatus; 837 under *adad*, Phaseolus mungo; 60 under *[illegible]*, Cajanus indicus; and 4087 under miscellaneous crops comprising *guvár*, Cyamopsis psoralioides; *math*, Phaseolus aconitifolius; *val*, Dolichos lablab; and *chola*, Vigna catiang. Oil seeds occupied 1764 acres, or ·92 per cent, of which 577 were under *tal*, Sesamum indicum; and 1187 under other oil-seeds. Fibres occupied 62,300 acres, or 32·56 per cent, under cotton, *kapás*, Gossypium herbaceum. Miscellaneous crops occupied 221 acres, or ·11 per cent, of which 9 were under sugarcane, *serdi*, Saccharam officinarum; 3 under tobacco, *tambáku*, Nicotiana tabacum; and 209 under miscellaneous vegetables and fruits.

People, 1872.

The 1872 census returns show of a total population of 128,044 souls, 117,244, or 91·56 per cent, Hindus; 10,773, or 8·41 per cent, Musalmáns; 13 Pársis; and 14 Christians. Statistics specially prepared from the enumerators' forms give the following caste details: 6046 Bráhmans, 6 Brahma-Kshatris, writers, 1759 Vániás, 419 Luvánás, 6512 Shrávaks, traders and merchants, 21,837 Kanbis, 1699 Rajputs, 1887 Sathvárás, 3813 Narodás, 252 Mális, 37,709 Kolis, cultivators, 308 Bhávsárs, calico-printers, 60 Ghánchis, oil-pressers, 287 Khatris, weavers, 1016 Sonis, gold and silver smiths, 1669 Suthárs, carpenters, 81 Kansárás, brass and copper smiths, 1637 Luhárs, blacksmiths, 1403 Darjis, tailors, 8 Chunárás, brick-layers, 451 Bháts, 321 Chárans, bards and genealogists, 3350 Kumbhárs, potters, 1751 Hajáms, barbers, 13 Dhobhis, washermen,

Chapter XIII.
Sub-divisions.
VIRAMGA'M.

6453 Bharváds and Rabáris, herdsmen and shepherds, 58 Golás, rice-pounders, 93 Purabiás and Maráthás, servants and labourers, 27 Bhois, fishers and labourers, 1615 Márvádis, labourers, 2582 Vághris, fowlers, hunters and beggars, 1519 Rávaliás, cotton tape-makers and beggars, 20 Bhils, cultivators, 126 Kámaliás, makers of blankets, *kámli*, 208 Ods, diggers, 282 Bajániás, acrobats, 516 Mochis, shoemakers, 2107 Chámadiás, tanners; 261 Garudás, 4547 Dheds, 1628 Bhangiás, depressed classes, and 908 religious beggars. As regards occupation the same return arranges the whole population under the seven following heads: i. Employed under Government or municipal or other local authorities, 787. ii. Professional persons, 433. iii. In service or performing personal offices, 1373. iv. Engaged in agriculture and with animals (*a*) cultivators 15,832, (*b*) labourers 2995; total 18,827. v. Engaged in commerce and trade, 2662. vi. Employed in mechanical arts, manufactures and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 16,118. vii. Miscellaneous persons not classed otherwise, (*a*) women 35,914 and children 49,403; in all 85,317, and (*b*) miscellaneous persons 2527; total 87,844.

SA'NAND.

Sa'nand Sub-division. Sánand is bounded on the north by Baroda territory, on the east by Daskroi, on the south by Dholka, and on the west by Viramgám. Its area is 360 square miles; its population, according to the 1872 census return, was 73,229 souls, or 203 to the square mile; and in 1877 its realizable land revenue was £17,256 (Rs. 1,72,560).

Area.

Of its 360 square miles, 162 are occupied by the lands of alienated and *tálukdári* villages. The rest, according to the revenue survey returns, contains 126,547 acres, or 55 per cent, of occupied land; 69,525 acres, or 30 per cent, of arable waste; 39,703 acres, or 17 per cent, of unarable waste; and 17,319 acres, or 8 per cent, of village sites, roads, ponds, and rivers. From 126,547 arable acres, 38,696, the area of alienated land in Government villages, has to be taken. Of the balanc 87,851 acres of arable Government land, 58,640 acres, or 66·75 per cen were in the year 1877-78 under cultivation.

Aspect.

Except an undulating strip of land in the west, Sánand is a rich plain in the centre of light soil with hedged well-wooded fields, and in the south and west a barer stretch of black soil. The people are on the whole good cultivators, living in rich villages with several fine ponds.

Climate.

The climate is like that of Daskroi; the water good, and in most years the rainfall sufficient.

Water.

Besides the Sábarmati, watering some of the alluvial lands in the east, Sánand is from north to south crossed by the Kohar, which loses itself in the Siál marsh. Though readily available its waters are little used for irrigation. Especially in the light soil tracts the wells are generally brackish and from having a substratum of gravel most of the ponds are dry early in the season. In 1877 the water-

Chapter XIII. Sub-divisions.

SA'NAND.

supply figures were 4 wells with steps, 1374 wells without steps, 5 water-lifts, *dhekudis*, 686 ponds or reservoirs, and 14 rivers, streams, and springs.

Soil.

In the north and centre the soil is light chiefly growing millet and pulse, in the south it is black yielding good rice, along the Sábarmati are some alluvial lands, and to the west near the Nal some black soils more or less charged with soda, *khár*, yield cotton, panic, *kodra*, and wheat.

Holdings.

In 1860-61, the year of settlement, 5674 holdings, *khátás*, were recorded with an average area of $12\frac{10}{40}$ acres, and an average rental of £1 9*s.* ½*d.* Rs. (14-8-4). Equally divided among the agricultural population, these holdings would, for each person, represent an allotment of $3\frac{7}{40}$ acres, at a yearly rent of 7*s.* 6¼*d.* (Rs. 3-12-2). If distributed among the whole population, the share to each would be $1\frac{29}{40}$ acres, and the incidence of the land tax 4*s.* 1½*d.* (Rs. 2-0-11).

Rental, 1860-61.

The following statement shows the arable area in forty-seven Government villages and the rates fixed in 1860-61 for twenty-seven years:

Sánand Rent Roll, 1860 61

Tenure.	Arable Land.	Occupied			Unoccupied.			Total.		
		Acres.	Rupee Assessment.	Average acre rate	Acres	Rupee Assessment.	Average acre rate	Acres.	Rupee Assessment	Average acre rate.
			Rs	Rs a p		Rs.	Rs. a. p		Rs.	Rs. a. p.
Government	Dry crop	23,834	41,290	1 11 9	34,244	38,154	1 1 10	58,078	79,444	1 5 11
	Garden	1634	9357	5 11 7	216	1110	5 2 0	1850	10,467	5 10 6
	Rice	5,361	22,866	4 4 3	5243	19,032	3 10 1	10,604	41,898	3 15 3
	Total	30,829	73,513	2 6 1	39,703	58,296	1 7 6	70,532	1,31,809	1 13 11
Alienated	Dry crop	31,527	41,906	1 5 3				31,527	41,906	1 5 3
	Garden	605	3351	5 8 7			.	605	3351	5 8 7
	Rice .	6563	23,823	3 10 1			.	6563	23,823	3 10 1
	Total	38,695	69,080	1 12 7		...		38,695	69,080	1 12 7
Total.	Dry crop	55,361	83,196	1 8 0	34,244	38,154	1 1 10	89,605	1,21,350	1 5 8
	Garden	2239	12,708	5 10 9	216	1110	5 2 0	2455	13,818	5 10 0
	Rice .	11 924	46,689	3 14 8	5243	19,032	3 10 1	17,167	65,721	3 13 3
	Grand Total	69,524	1,42,593	2 0 10	39,703	58,296	1 7 6	109,227	2,00,889	1 13 5

	Rs. a. p.	£ s. d.
Assessment on Government and alienated land	2,00,889 1 4	20,088 18 2
Deduct—Alienations	69,080 3 6	6908 0 5¼
Remains	1,31,808 13 10	13,180 17 8¾
Add—Quit-rents	8,867 9 0	886 15 1½
Grazing farms and river-bed tillage	8,396 7 6	839 12 11¼
Total revenue ..	1,49,072 14 4	14,907 5 9½

Stock, 1876-77.

The 1872 population, 73,229 souls, lodged in 26,311 houses, were, in 1876-77, supplied with 1378 wells and 686 ponds, and owned 7349

Chapter XIII.
Sub-divisions.

ploughs, 2392 carts, 16,284 oxen, 8087 cows, 17,019 buffaloes, 441 horses, 6615 sheep and goats, and 1107 asses.

SANAND.
Produce, 1877-78.

In 1877-78 of 132,739 acres the total area of cultivated land, 58,222, or 43·86 per cent were fallow or under grass. Of the remaining 74,517 acres, 657 were twice cropped. Of the 75,174 acres under actual cultivation, grain crops occupied 62,144 acres, or 82·66 per cent, 25,616 of them under *juvár*, Sorghum vulgare; 12,559 under wheat, *ghau*, Triticum æstivum; 12,160 under *bájri*, Penicillaria spicata; 6325 under paddy and rice, *dángar*, Oryza sativa; 2423 under barley, *jav*, Hordeum hexastichon; 1539 under *kodra*, Paspalum scrobiculatum; and 1522 under miscellaneous cereals. Pulses occupied 2771 acres, or 3·68 per cent, of which 619 acres were under gram, *chana*, Cicer arietinum; 736 under *mug*, Phaseolous radiatus; 435 under *adad*, Phaseolous mungo; 97 under *tuver*, Cajanus indicus; and 884 under miscellaneous crops, comprising *guvár*, Cyamopsis psoralioides; *math*, Phaseolus aconitifolius; *val*, Dolichos lablab; and *chola*, Vigna catiang. Oil-seeds occupied 1264 acres, or 1·68 per cent, of which 124 were under *tal*, Sesamum indicum; and 1140 under other oilseeds. Fibres occupied 8163 acres, or 10·85 per cent, of which 8125 acres were under cotton, *kapás*, Gossypium herbaceum; and 38 under hemp, *san*, Crotalaria juncea. Miscellaneous crops occupied 832 acres, or 1·10 per cent, of which 583 acres were under sugarcane, *serdi*, Saccharum officinarum; 46 under safflower, *kasumba*, Carthamus tinctorius; 48 under tobacco, *tambáku*, Nicotiana tabacum; and 155 under miscellaneous vegetables and fruits.

People, 1872.

The 1872 census returns show of a total population of 73,229 souls, 68,831, or 93·99 per cent Hindus; 4395, or 6·00 per cent Musalmáns; and 3 Christians. Statistics specially prepared from the enumerators' forms give the following caste details: 3772 Bráhmans; 3 Brahma-Kshatris; 1 Parbhu, writers; 274 Vániás, 3167 Shrávaks, 651 Luvánás, traders and merchants; 11,618 Kanbis, 8019 Rajputs, 88 Sathvárás, 16 Mális, 11 Káchhiás, 21,138 Kolis, cultivators, 41 Ghánchis, oilpressers; 253 Bhávsárs, calicoprinters; 194 Sonis, gold and silver smiths; 816 Suthárs, carpenters; 647 Luhárs, blacksmiths; 355 Darjis, tailors; 7 Kadiás, bricklayers; 368 Bháts, 155 Chárans, bards and genealogists; 1831 Kumbhárs, potters; 1287 Hajáms, barbers; 64 Dhobhis, washermen; 3467 Bharváds and Rabáris, herdsmen and shepherds; 90 Golás, ricepounders; 230 Bhois, fishers and labourers; 21 Márvádis, labourers; 12 Pakhális, water-bearers; 1655 Vághris, fowlers, hunters, and beggars; 992 Rávaliás, cotton tapemakers and beggars; 34 Kámaliás, makers of blankets, *kámli*; 116 Ods, diggers; 132 Bajániás, acrobats; 342 Mochis, shoemakers; 1008 Chámadiás, tanners; 148 Garudás, 4042 Dheds, 731 Sindhvás, 683 Bhangiás, depressed classes; and 352 religious beggars. As regards occupation, the same return arranges the whole population under the seven following heads: i. Employed under Government or municipal or other local authorities, 300. ii. Professional persons, 425. iii. In service or performing personal offices, 687. iv. Engaged in agriculture and with animals, (*a*) cultivators 15,073; (*b*) labourers 1539; total 16,612. v. Engaged

in commerce and trade, 1876. vi. Employed in mechanical arts, manufactures and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 1641. vii. Miscellaneous persons not classed otherwise, (*a*) women 17,575, and children 32,123, in all 49,698, and (*b*) miscellaneous persons 1990, total 51,688.

Dholka Sub-division. Dholka is bounded on the north by Sánand, on the east by Mátar in Kaira and by Cambay, on the south by Dhandhuka and on the west by Káthiáwár and the Nal. Its area is 690 square miles ; its population according to the 1872 census return was 113,375 souls, or 164 to the square mile, and in 1877 its realizable land revenue was £28,920 (Rs. 2,89,200).

DHOLKA.

Area.

Of its 690 square miles, 360 are occupied by the lands of alienated and *tálukdári* villages. The rest, according to the revenue survey returns, has 210,995 acres or 48 per cent of occupied land ; 117,591 acres or 26 per cent of arable waste, 54,893 acres or 13 per cent of unarable waste ; and 38,511 acres, or 9 per cent of village sites, roads, ponds, and rivers. From 210,995 arable acres, 72,685, the area of alienated land in Government villages, has to be taken. Of the balance 138,310 acres of arable Government land, 93,073 acres or 67·29 per cent were in the year 1877-78 under tillage.

Aspect.

Dholka is a plain sloping south-west to the little Ran. In the east along the Sábarmati and near Dholka the fields are hedged and the land thick planted with fruit trees. The south-west is low, barren and flat as if not very long ago it had lain under the sea.

Climate.

The eastern parts along the Sábarmati, cooled by the sea-breeze are more temperate than Daskroi. But the south-west is most bleak, open to biting winds in the cold season and burning winds in the hot. The average rainfall is thirty inches.

Water.

Except the Kohar little more than a local drain, the only river is on the east the Sábarmati, its waters much used for irrigation. In 1877 the water-supply figures were 64 wells with steps, 2470 wells without steps, 132 water-lifts, *dhekudis*, 725 ponds or reservoirs, and 4 rivers, streams, and springs.

The light soils have a large store of well water and the black soils are well provided with ponds. Within the sub-division are most of the chief varieties of soil. In the north is rice land, *kiyárdá*, in the east near Dholka the finest light, *gorát*, along the course of the Sábarmati alluvial soil, and poor brackish black in the south and west. The garden, *máliat*, produce of Dholka is unsurpassed.

Holdings.

In 1856-57, the year of settlement, 9763 holdings, *khátás*, were recorded with an average area of $12\frac{2}{40}$ acres and an average rental of £1-0-9¼*d*. (Rs. 10-6-2). Equally divided among the agricultural population, these holdings would, for each person, represent an allotment of $4\frac{2}{40}$ acres, at a yearly rent of 7*s*. (Rs. 3-8-0). If distributed among the whole population of the sub-division, the share to each would be $1\frac{29}{40}$ acres and the incidence of the land-tax 2*s*. 11½*d*. (Rs. 1-7-8).

Chapter XIII.

Sub-divisions.

DHOLKA.

Rental, 1856-57.

The following statement shows the arable area in seventy-six Government villages and the rates fixed in 1856-57 for thirty years:

Dholka Rent Roll, 1856-57.

Tenure.	Arable Land.	Occupied. Acres.	Occupied. Rupee Assessment.	Occupied. Average acre rate.	Unoccupied. Acres.	Unoccupied. Rupee Assessment.	Unoccupied. Average acre rate.	Total. Acres.	Total. Rupee Assessment.	Total. Average acre rate.
		A. g.	Rs. a.	Rs. a. p.	A. g.	Rs. a.	Rs. a. p.	A. g.	Rs. a.	Rs. a. p.
Government.	Dry crop ...	40,488 0	61,792 2	1 8 5	50,035 25	58,669 14	1 2 8	90,523 25	1,20,462 0	1 5 3
	Garden ...	...	...	...	...	...	..	...	...	...
	Rice	4417 33	19,434 6	4 6 4	4857 20	16,930 2	3 7 11	9275 13	36,364 8	3 14 8
	Total ...	44,905 33	81,226 8	1 12 11	54,893 5	75,600 0	1 6 0	99,798 38	1,56,826 8	1 9 0
Alienated.	Dry crop ...	68,572 6	97,665 12	1 6 11	...	...	...	68,572 6	97,665 12	1 6 11
	Garden ...	...	...	...	...	...	...	...	...	...
	Rice	4112 20	16,155 8	3 14 0	...	...	...	4112 20	16,155 8	3 14 0
	Total ...	72,684 26	1,13,821 4	1 9 0	...	...	...	72,684 26	1,13,821 4	1 9 0
Total.	Dry crop ...	109,060 6	1,59,457 14	1 8 0	50,035 25	58,669 14	1 2 8	159,095 31	2,18,127 12	1 5 11
	Garden ...	...	...	...	...	...	...	...	...	...
	Rice	8530 13	35,589 14	4 2 9	4857 20	16,930 2	3 7 11	13,387 33	52,520 0	3 14 9
	Grand Total.	117,590 19	1,95,047 12	1 10 6	54,893 5	75,600 0	1 6 0	172,483 24	2,70,647 12	1 9 0

	Rs. a. p.	£. s. d.
Assessment—Government and alienated land ...	2,70,647 12 0	27,064 15 6
Deduct—Alienations...	1,13,821 4 0	11,382 2 6
Remains	1,56,826 8 0	15682 13 0
Add—Quit-rents	20,174 4 0	2017 8 6
Add—Grazing farms and river-bed tillage ...	15,316 10 2	1531 13 3¼
Total revenue	1,92,317 6 2	19,231 14 9¼

Stock, 1877-78.

The 1872 population, 113,375 souls, lodged in 28,338 houses, were, in 1876-77, supplied with 2534 wells and 725 ponds and owned 10,532 ploughs, 4358 carts, 24,657 oxen, 1480 cows, 21,702 buffaloes, 1068 horses, 12,181 sheep and goats, 1674 asses and 79 camels.

Produce, 1877-78.

In 1877-78 of 222,141 acres, the total area of cultivated land 60,960, or 27·44 per cent, were fallow or under grass. Of the remaining 161,181 acres, 1533 were twice cropped. Of the 162,714 acres under actual cultivation, grain crops occupied 136,891 acres, or 84·12 per cent, 91,638 of them under wheat, *ghau*, Triticum æstivum; 29,889 under *juvár*, Sorghum vulgare; 7625 under *bájri*, Penicillaria spicata; 4748 under barley, *jav*, Hordeum hexastichon; 1100 under *kodra*, Paspalum scrobiculatum; 889 under paddy and rice, *dángar*, Oryza sativa; and 1002 under miscellaneous cereals. Pulses occupied 5265 acres, or 3·23 per cent, of which 2845 acres were under gram, *chana*, Cicer arietinum; 363 under *mag*, Phaseolus radiatus; 160 under *tuver*, Cájanus indicus; and 1897 under miscellaneous crops, comprising *guvár*, Cyamopsis psoralioides; *math*,

Phaseolus miscellaneous aconitifolius; *val*, Dolichos lablab; and *chola*, Vigna catiang. Oilseeds occupied 3342 acres, or 2·05 per cent, of which 1359 were under *tal*, Sesamum indicum; and 1983 under other oilseeds. Fibres occupied 14,645 acres, or 9·00 per cent, of which 14,638 acres were under cotton, *kapás*, Gossypium herbaceum; and 7 under hemp, *san*, Crotalaria juncea. Miscellaneous crops occupied 2571 acres, or 1·58 per cent, of which 633 acres were under sugar-cane, *serdi*, Saccharum officinarum; 502 under saffiower, *kasumba*, Carthamus tinctorius; 152 under tobacco, *tambáku*, Nicotiana tabacum; and 1284 under miscellaneous vegetables and fruits.

People, 1872.

The 1872 census returns show of a total population of 113,375 souls, 101,487 or 89·51 per cent Hindus; 11,886 or 10·48 per cent Musalmáns; and 2 Pársis. Statistics specially prepared from the enumerators' forms give the following caste details: 6614 Bráhmans; 31 Brahma-Kshatris, 17 Káyasths, writers; 3165 Vániás, 1290 Luvánás, and 1896 Shrávaks, traders and merchants; 12,672 Kanbis, 10,509 Rajputs, 49 Sathvárás, 1788 Káchhiás, 189 Mális, and 27,520 Kolis, cultivators; 333 Bhávsárs, calicoprinters; 182 Khatris, weavers; 471 Ghánchis, oilpressers; 630 Sonis, gold and silver smiths; 1442 Suthárs, carpenters; 71 Kansárás, brass and copper smiths; 944 Luhárs, blacksmiths; 634 Darjis, tailors; 13 Chunárás, bricklayers; 576 Bháts, and 431 Chárans, bards and genealogists; 2366 Kumbhárs, potters; 1776 Hajáms, barbers; 127 Dhobhis, washermen; 4880 Bharváds, and 831 Rabáris, herdsmen and shepherds; 693 Golás, ricepounders; 42 Purabiás and Maráthás, servants and labourers; 549 Bhois, fishers and labourers; 581 Márvádis, labourers; 2607 Vághris, fowlers, hunters, and beggars; 853 Rás aliás, cotton tapemakers, and beggars; 17 Kámaliás, makers of blankets, *kámli*; 151 Ods, diggers; 554 Bajániás, acrobats; 2962 Mochis, shoemakers; 410 Garudás, 7443 Dheds, and 2348 Bhangiás, depressed classes; and 830 religious beggars. As regards occupation the same return arranges the whole population under the seven following heads: i. Employed under Government or municipal or other local authorities, 1158. ii. Professional persons, 854. iii. In service or performing personal offices, 1859. iv. Engaged in agriculture and with animals, (*a*) cultivators 16,209, (*b*) labourers 2361, total 18,570. v. Engaged in commerce and trade, 1833. vi. Employed in mechanical arts, manufactures and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 25,183. vii. Miscellaneous persons not classed otherwise, (*a*) women 22,180, and children 38,520; in all 60,700, and (*b*) miscellaneous persons 3218; total 63,918.

DHANDHUKA.

Dhandhuka Sub-division. Dhandhuka is bounded on the north, west, and south by Káthiáwár and on the east by the Gulf of Cambay. Its area is 1107 square miles, its population according to the 1872 census return was 124,860 souls, or 112 to the square mile, and in 1877 its land revenue was £23,250 (Rs. 2,32,500).

Of its 1107 square miles, 972 are occupied by alienated and *tálukdári* villages. The rest according to the revenue survey returns contains 86,236 acres or 12 per cent of occupied land, 34,187 acres or 5 per cent of arable waste; 13,772 acres or 2 per

Chapter XIII.
Sub-divisions.
DHANDHUKA.

cent of unarable waste, and 38,277 acres or 5 per cent of village sites, roads, ponds and rivers. From 86,236 arable acres, 14,728 the area of alienated land in Government villages, has to be taken. Of the balance 71,508 acres of arable Government land, 36,412 acres or 50·92 per cent were in the year 1877-78 under tillage.

Aspect. Except in the west a tract of bare hills and rough valleys with millet fields and garden patches, Dhandhuka is an open, treeless, blacksoil plain sloping towards the Gulf shore, growing cotton in the centre and wheat in the east.

Climate. With a short rainfall of from sixteen to twenty-four inches, with no shade and swept by a burning land wind, the climate of Dhandhuka is, except in the cold season, most trying.

Water. The water-supply is scanty. There are no large rivers. The Bhádhar and Utávli, little more than streams, lose themselves in the marshes. Ponds are bad, wells few, and irrigation very limited. In 1877 the water-supply figures were 13 wells with steps, 787 wells without steps, 170 ponds or reservoirs, and 22 rivers, streams, and springs.

Soil. In the west is some coarse light soil. But the rest is black well suited for cotton and wheat.

Holdings. In 1857-58 the year of settlement, 1140 holdings, *khátás*, were recorded with an average area of 30 acres and an average rental of £2 4*s* 9½*d*. (Rs. 22-6-4). Equally divided among the agricultural population these holdings would, for each person, represent an allotment of $6\frac{25}{40}$ acres at a yearly rent of 9*s*. 10¾*d*. (Rs. 4-15-2). If distributed among the whole population of the sub-division, the share to each would amount to 2 acres, and the incidence of the land tax 2*s*. 11¾*d*. (Rs. 1-7-9).

Rental, 1857-58. The following statement shows the arable area in twelve Government villages, and the rates fixed in 1857-58 for thirty years :

Dhandhuka Rent Roll, 1857-58.

Tenure.	Arable Land.	Occupied.			Unoccupied.			Total.		
		Acres.	Rupee Assessment.	Average acre rate.	Acres.	Rupee Assessment.	Average acre rate.	Acres.	Rupee Assessment.	Average acre rate.
		A. g.	Rs. a.	Rs. a. p.	A. g.	Rs. a.	Rs. a. p.	A. g.	Rs. a	Rs. a. p.
Government.	Dry crop ...	19,115 29	24,242 11	1 4 3	13,771 39	9960 0	0 11 7	32,887 28	34,202 1.	1 0 8
	Garden... ...	343 12	506 13	1 7 7	..	...	...	343 12	506 13	1 7 7
	Rice	...	...	...	...	...	...	...	...	...
	Total ...	19,459 1	24,749 8	1 4 4	13,771 39	9960 0	0 11 7	33,231 0	34,709	1 0 9
Alienated.	Dry crop ...	14,483 34	18,100 12	1 4 0	...	...	...	14,483 34	18,100 12	1 4 0
	Garden	243 32	272 0	1 1 10	...	...	...	243 32	272 0	1 1 10
	Rice	...	...	...	...	...	.	...	...	...
	Total ...	14,727 26	18,372 12	1 4 0	...	...	...	14,727 26	18,372 12	1 4 0
Total.	Dry crop ...	33,599 23	42,343 7	1 4 2	13,771 39	9960 0	0 11 7	47,371 22	52,303 7	1 1 8
	Garden	587 4	778 13	1 5 2	...	...	...	587 4	778 13	1 5 2
	Rice	...	...	...	. .	.	..	...	...	
	Grand Total .	34,186 27	43,122 4	1 4 2	13,771 39	9960 0	0 11 7	47,958 26	53,082 4	1 1 9

	Rs.	a.	p.	£.	s.	d.
Assessment on Government and alienated land ...	53,082	4	0	5308	4	6
Deduct—Alienations	18,372	12	0	1837	5	6
Remains	34,709	8	0	3470	19	0
Add—Quitrents	783	9	4	78	7	2
,, Grazing farms and river-bed tillage ...	5894	0	4	589	8	0½
Total ...	41,387	1	8	4138	14	2½

Stock, 1876-77.

The 1872 population 124,860 souls, lodged in 40,382 houses were, in 1876-77, supplied with 800 wells, 170 ponds, and owned 7365 ploughs, 3666 carts, 19,027 oxen, 11,545 cows, 11,486 buffaloes, 1640 horses, 9189 sheep and goats, 1324 asses, 80 camels and one elephant.

Produce, 1877-78.

In 1877-78 of 339,084 acres the total area of land cultivated, 92,471 or 27·27 per cent were fallow or under grass. Of the remaining 246,613 acres, 2780 acres were twice cropped. Of the 249,393 acres under actual cultivation, grain crops occupied 182,543 acres or 73·19 per cent, 100,431 of them under wheat, *ghau*, Triticum æstivum; 47,159 under *juvár*, Sorghum vulgare; 31,314 under *bájri*, Penicillaria spicata; 25 under barley, *jav*, Hordeum hexastichon; 13 under paddy and rice, *dángar*, Oryza sativa, and 3601 under miscellaneous cereals. Pulses occupied 6189 acres or 2·48 per cent, of which 6155 acres were under gram, *chana*, Cicer arietinum; and 34 under miscellaneous crops, comprising *guvár*, Cyamopsis psoralioides; *math*, Phaseolus aconitifolius; *val*, Dolichos lablab; and *chola*, Vigna catiang. Oilseeds occupied 4259 acres, or 1·70 per cent, of which 4151 were under *tal*, Sesamum indicum; and 108 under other oilseeds. Fibres occupied 55,696 acres, or 22·33 per cent, under cotton, *kapás*, Gossypium herbaceum. Miscellaneous crops occupied 706 acres or 0·28 per cent, of which 355 acres were under sugarcane *serdi*, Saccharum officinarum, 17 under safflower, *kasumbo*, Carthamus tinctorius; and 334 under miscellaneous vegetables and fruits.

People, 1872.

The 1872 census returns show of a total population of 124,860 souls, 111,942 or 89·65 per cent Hindus; 12,852 or 10·29 per cent Musalmáns; 11 Pársis; and 55 Christians. Statistics specially prepared from the enumerators' forms give the following caste details: 5295 Bráhmans, 56 Brahma-Kshatris, 12 Parbhus, 14 Káyasths, writers; 7288 Vániás, 1191 Luvánás, 4806 Shrávaks, traders and merchants; 8816 Kanbis, 11,227 Rajputs, 4524 Sathvárás, 344 Mális, 1523 Káthis and 30,502 Kolis, cultivators; 746 Bhávsárs, calico-printers; 8 Chhipás, calenders; 146 Khatris, weavers; 906 Sonis, gold and silver smiths; 1793 Suthárs, carpenters; 280 Kansárás, brass and copper smiths; 1584 Luhárs, blacksmiths; 1885 Darjis, tailors; 29 Kadiás, bricklayers; 154 Bháts, 931 Chárans, bards and genealogists; 5240 Kumbhárs, potters; 1616 Hajáms, barbers; 87 Dhobhis, washermen; 5425 Bharváds and Rabáris, herdsmen and shepherds; 17 Golás, ricepounders; 19 Maráthás, labourers, 416 Khavás, servants; 1616 Vághris, fowlers, hunters,

Chapter XIII. Sub-divisions.

and beggars; 774 Rávaliás, cotton tapemakers and beggars; 298 Ods, diggers; 367 Bajániás, acrobats; 778 Mochis, shoemakers; 1723 Chámadiás, tanners; 317 Garudás, 5493 Dheds, 2161 Bhangiás, depressed classes; and 1535 religious beggars. As regards occupation the same return arranges the whole population under the seven following heads: i. Employed under Government or municipal or other local authorities, 850. ii. Professional persons, 1191. iii. In service or performing personal offices, 1788. iv. Engaged in agriculture and with animals (*a*) cultivators 15,721, (*b*) labourers 2467, total 18,188. v. Engaged in commerce and trade, 2048. vi. Employed in mechanical arts, manufactures and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 32,110. vii. Miscellaneous persons not classed otherwise, (*a*) women 25,255 and children 40,997, in all 66,252 and (*b*) miscellaneous persons 2433; total 68,685.

GOGHA.

Gogha Sub-division. Except four villages on the Cambay Gulf, Gogha is on all sides surrounded by Bhávnagar land. Its area is 224 square miles; its population according to the 1872 census return, was 33,829 souls or 151 to the square mile, and in 1877 its realizable land revenue was £3362 (Rs. 33,620).

Area.

Of its 224 square miles, 204 are occupied by the lands of alienated and *tálukdári* villages. The rest, according to the revenue survey returns, contains 12,852 acres or 9 per cent of occupied land, 3987 acres or 2¾ per cent of arable waste, 1468 acres or one per cent of unarable waste, and 7397 acres or 5¼ per cent of village sites, roads, ponds and rivers. From 12,852 arable acres, 2087 the area of alienated land in Government villages, has to be taken. Of the balance 10,765 acres of arable Government land, 3675 acres or 34·14 per cent were in the year 1877-78 under tillage.

Aspect.

A narrow plain skirting the shore of the Gulf, and behind hills with well-tilled and well-wooded valleys full of springs, Gogha is especially at the close of the rains a place of much beauty. The hills known as the Khokhra range are chiefly limestone. Barvála the highest peak is about 600 feet above the sea.

Climate.

Close to the sea the climate is healthy and cool, especially in the hot weather months, when a strong steady sea-breeze blows. The rain seldom more than twenty and often as little as twelve inches is light but falling on a retentive subsoil is sufficient.

Water.

Many of the streams, though small, flow throughout the year. There are few ponds and irrigation is chiefly from wells dug near the streams. In 1877 the water-supply figures were 21 wells with steps, 403 wells without steps, 23 ponds or reservoirs, and 60 rivers, streams and springs.

Soil.

In the valleys is some rich chalky loam. In other parts the soil is red in colour, shallow and gritty.

Holdings.

In 1858-59 the year of settlement, 165 holdings, *khátás,* were recorded with an average area of $24\frac{6}{10}$ acres and an average rental of £1 4*s.* 5½*d.* (Rs. 12-3-8). Equally divided among the agricultural population these holdings would for each person represent an allotment of $5\frac{3}{10}$ acres at a yearly rent of 5*s.* 1½*d.* (Rs. 2-9-1). If

Chapter XIII.
Sub-divisions.
GOGHA.

distributed among the whole population of the sub-division, the share to each would be $\frac{15}{40}$ acres and the incidence of the land tax $5\frac{1}{2}d$. (Rs. 0-3-7).

Rental, 1858-59.

The following statement shows the arable area in four Government villages and the rates fixed in 1858-59 for thirty years:

Gogha Rent Roll, 1858-59.

Tenure.	Arable Land.	Occupied.			Unoccupied.			Total.		
		Acres.	Rupee Assessment.	Average acre rate.	Acres.	Rupee Assessment.	Average acre rate.	Acres.	Rupee Assessment.	Average acre rate.
			Rs.	Rs. a. p.		Rs.	Rs. a. p.			Rs. a. p.
Government.	Dry crop ...	1786	1465	0 13 1	1459	982	0 10 10	3245	2447	0 12 1
	Garden ...	114	494	4 5 4	9	36	3 15 1	123	530	4 4 8
	Rice	...	...	...	...	...	...	...	...	...
	Total ...	1900	1959	1 0 6	1468	1018	0 11 1	3368	2977	0 14 2
Alienated.	Dry crop ...	1967	1887	0 15 4	...	...	...	1967	1887	0 15 4
	Garden ...	119	496	4 2 8	...	...	...	119	496	4 2 8
	Rice	...	...	...	...	...	...	...	...	...
	Total ...	2086	2383	1 2 3	...	...	...	2086	2383	1 2 3
Total.	Dry crop ...	3753	3352	0 14 3	1459	982	0 10 10	5212	4334	0 13 3
	Garden ...	233	990	4 3 10	9	36	3 15 1	242	1026	4 3 7
	Rice	...	...	...	...	...	...	...	...	...
	Grand Total.	3986	4342	1 1 5	1468	1018	0 11 1	5454	5360	0 15 8

	Rs. a. p.	£. s. d.
Assessment on Government and alienated land...	5360 0 0	536 0 0
Deduct—Alienations	2383 8 0	238 7 0
Remains	2976 8 0	297 13 0
Add—Quit-rents	58 8 0	5 17 0
„ Grazing farms and river bed-tillage ...	3794 13 6	379 9 8¼
Total revenue ...	6829 13 6	682 19 8¼

Stock, 1876-77.

The 1872 population 33,829 souls, lodged in 10,571 houses, were, in 1876-77, supplied with 424 wells and 23 ponds, and owned 1962 ploughs, 543 carts, 4376 oxen, 2386 cows, 2313 buffaloes, 385 horses, 4963 sheep and goats, and 1385 asses.

Produce, 1877-78.

In 1877-78, of 94,297 acres the total area of cultivated land, 58,634 acres or 62·18 per cent, were fallow or under grass. Of the remaining 35,663 acres, 1405 were twice cropped. Of the 37,068 acres under actual cultivation, grain crops occupied 33,453 acres, or 90·24 per cent, 25,947 of them under *juvár*, Sorghum vulgare; 5398 under *bájri*, Penicillaria spicata; 2026 under wheat, *ghau*, Triticum æstivum; 57 under paddy and rice, *dángar*, Oryza sativa; and 25 under miscellaneous cereals. Pulses occupied 1552 acres, or 4·18 per cent, of which 1307 acres were under gram, *chana*, Cicer arietinum; and 245 under miscellaneous crops, comprising *guvár*, Cyamopsis psoralioides; *math*, Phaseolus aconitifolius; *vál*, Dolichos lablab; and *chola*, Vigna catiang. Oilseeds occupied 1934 acres, or 5·21 per cent, under *tal*, Sesamum indicum. Fibres occupied 42 acres,

Chapter XIII.
Sub-divisions.
GOGHA.

or 0·11 per cent under cotton, *kapás*, Gossypium herbaceum. Miscellaneous crops occupied 87 acres, or 0·23 per cent, of which 14 acres were under sugarcane, *serdi*, Saccharum officinarum; and 73 under miscellaneous vegetables and fruits.

People, 1872.

The 1872 census returns show of a total population of 33,829 souls, 29,468, or 87·10 per cent Hindus; 4305, or 12·72 per cent Musalmáns; 8 Pársis; and 48 Christians. Statistics specially prepared from the enumerators' forms give the following caste details: 2876 Bráhmans; 8 Brahma-Kshatris, 3 Káyasths, writers; 1496 Vániás, 1394 Shrávaks, 56 Luvánás, traders and merchants; 974 Kanbis, 5378 Rajputs, 79 Káchhiás, 636 Mális, 7923 Kolis, cultivators; 150 Bhávsárs, calico-printers; 56 Chhipás, calenders; 432 Sonis, gold and silver smiths; 552 Suthárs, carpenters; 25 Kansárás, brass and copper smiths; 310 Luhárs, blacksmiths; 32 Darjis, tailors; 29 Kadiás, bricklayers; 58 Saláts, masons; 205 Bháts, bards; 693 Kumbhárs, potters; 469 Hajáms, barbers; 82 Dhobhis, washermen; 1446 Bharváds and Rabáris, herdsmen and shepherds; 23 Golás, ricepounders; 92 Bhois, fishers and labourers; 4 Purabiás, servants; 149 Vághris, fowlers, hunters and beggars; 150 Rávaliás, cotton tapemakers and beggars; 13 Ods, diggers; 203 Bhils, cultivators; 460 Mochis, shoemakers; 390 Chámadiás, tanners; 18 Garudás, 1804 Dheds, 383 Bhangiás, depressed classes; and 417 religious beggars. As regards occupation, the same return arranges the whole population under the seven following heads: i. Employed under Government or municipal or other local authorities, 496. ii. Professional persons, 225. iii. In service or performing personal offices, 291. iv. Engaged in agriculture and with animals, (*a*) cultivators 5175, (*b*) labourers 1195, total 6370. v. Engaged in commerce and trade, 941. vi. Employed in mechanical arts, manufactures and engineering operations, and engaged in the sale of articles manufactured or otherwise prepared for consumption, 6854. vii. Miscellaneous persons not classed otherwise, (*a*) women 6857 and children 10,369, in all 17,226 and (*b*) miscellaneous persons 1426; total 18,652.

AHMEDABAD CITY

Scale. 32 Chains or 704 Yards = 1 Inch

32 24 16 8 0 32

SÁBARMATI RIVER

Shahápur Gate
Shahápur Mosque
SHÁHÁPUR
Sultán Kutb-ud-dín's Mosque
Bechardás Dispensary
DARYÁPUR
Pranábhái Gate
Daryápur Gate
Dispensary
Jail Camp & Shahi Bag
HATIPURA
BORRADAILE PURA
MÁDHAVPURA
IDARYA
English Church
Muhafiz Khán's Mosque
Traveller's Bungalow
Green's Mosque
MIRZÁPUR
R.C. Chapel
DARYÁPUR
Swáminárayan's Temple
Khánpur Gate
Syed Alam's Mosque
KHÁNPUR
Shah Vajeh-ud-dín's Tomb
Civil Hospital
Judges Court
Sidi Syed's Mosque
JAWHERI
VÁDA
TINLIMBDI
RÁYPUR
BHANDERIPUR
Kalupur Gate
RAILWAY STATION
SARASPUR
Railway Mosque
Bárádari Gate
Collector's Offices
Idal Gate
CITADEL OR BHADAR
3 Gate
MÁNEKCHOK
KHÁDIYA
Pandhawa Gate
Sidi Bashir's Mosque
Clock Tower
Ayam Khán's Palace (Jail)
KHÁS BAZÁR
Post Office
Training College
Sárangpur Gate
SÁRANGPUR
Rám Gate
Mánek Tower from Sarkhej
Prárthana Samáj Temple
Muhammad Ghazi's Mosque
RÁYKHÁD
Ráykhad Gate
Ásá Bhil's Mound
Rání Sipri's Mosque
Dastur Khán's Mosque
BHAVANI PURA
RAGHUNATH PURA
KÁGDA PITH
Gáikwár's Palace
JAMÁLPUR
ÁSTODIYA
from Sháh Alam
Road to Kánkariya Lake and Dutch Tombs
Khán Jahán Gate
Haibat Khán's Mosque
Christian Graveyard
Jamálpur Gate
Mahudha Gate

REFERENCE.

1. Govt. High School
2. Sultán Ahmed's Mosque
3. Mission School
4. Animal Home
5. Dutch Factory (Bd. of Bombay)
6. Jáma Mosque
7. Sultán Ahmed's Tomb
8. Sultán Ahmed's Wives' Tombs
9. The Queen's Mosque
10. Old Mint
11. Gosái Mahárája's Temple
12. Ástodiya Gate
13. Ráypur Gate
14. Mánek & Ganesh Gates

Govt. Photozincographic Office, Poona. 1879.

CHAPTER XIV.

PLACES OF INTEREST.

AHMEDABAD.

Aspect.

IN north latitude 23° 1′, and east longitude 72° 37′, on the left bank of the Sábarmati, about 173 feet above mean sea level, and fifty miles north of the head of the Cambay Gulf, the city of Ahmedabad covers an area of two square miles.

Outside the city the country is well wooded, and, far beyond the limits of the present dwellings, its surface is roughened by the remains of the suburbs[1] and villages that, in the times of its greatest prosperity, formed part of Ahmedabad. Along the west of the town flows the Sábarmati, except in the rains a thin stream of water in a broad bed of deep sand, and to the north, east, and south, are hedged fields of cotton and millet, thick studded with tombs, mosques, and old stone-built reservoirs and wells.

The City Walls, running on the west for about a mile and three quarters along the bank of the Sábarmati, and stretching east in semi-circular form, include an area of two square miles, thickly peopled to the north and east, and with fewer houses and more trees to the south and west. Within city limits there are, according to the latest returns, twenty-eight miles of made roads, 35,284 houses, and a population of 116,873 souls. The municipal revenue amounted in 1878 to £22,545 (Rs. 2,25,450).[2]

History.

Section I.—History.

In 1411 (March 4th)[3] Sultán Ahmad I.,[4] like his father Sultán Muhammad, fond of the site and air of Asával on the Sábarmati, chose it as his capital, and in honour of four Ahmads, himself, his religious teacher Shaikh Ahmad Khattu, and two others, Kázi Ahmad and Malik Ahmad, named it Ahmedabad.[5] Since 1411,

---

1 Details are given below at page 327.

2 The population figures are for 1872; the road and revenue figures for 1878.

3 Zi Kádah 7th, 813 H. Blochmann's Ain-i-Akbari, I. 507. Ferishta gives 1413 (late in 815 H.). Briggs, IV. 14.

4 Sultán Ahmad was grandson of Sultán Muzaffar (1391-1411), the son of a converted Ták Rajput. Muzaffar, in 1351 ennobled by the Emperor Firoz Tughlik, was in 1391 made Governor of Gujarát, and from that time was practically an independent ruler.

5 The story is that the king, by the aid of the saint Shaikh Ahmad Khattu, called up the prophet Elijah or Khizr, and from him got leave to build a city if he could find four Ahmads who had never missed the afternoon prayer. A search over Gujarát yielded two, the saint was the third, and the king the fourth. Arch. Surv. 1874-75, 2. The four Ahmads are said to have been helped by twelve Bábás; these were Bába

Chapter XIV. Places of Interest. AHMEDABAD. History.

Ahmedabad has passed through five periods, two of greatness, two of decay, and one of revival. First under strong rulers came a hundred years (1411-1511) of growth and rising wealth; then sixty years (1512-1572) of decline during the decay of the Gujarát dynasty; next 135 years (1572-1707) of renewed greatness under the early Moghal Emperors; again 110 years (1707-1817) of disorder and loss under weakly Moghals and greedy Maráthás, and last of all, sixty years (1818-1878) of steady progress under British rule.

Ahmedabad Kings, 1411-1572.

Clearing the neighbourhood of robbers and highwaymen,[1] Ahmad built a citadel or fort of much strength and beauty, calling it Bhadar after the Pátan citadel;[2] laid out his city in broad fair streets,[3] and added to the Sábarmati's scanty stream by turning into it the waters of the Háthmati.[4] Bringing marble and other rich building material from Anhilváda and Chandrávati,[5] he raised magnificent mosques, palaces, and tombs,[6] and gathering merchants, weavers, and skilled craftsmen, made Ahmedabad a centre of trade and manufacture. During the rest of the fifteenth century, under powerful, rich, and successful rulers, Ahmedabad grew steadily in size and wealth and in the number and beauty of its public buildings. Among its rulers Sultán

---

Khoju, Bába Láru, and Bába Karámal, buried at Dholka; Bába A'li Sher and Bába Mahmud buried at Sarkhéj; a second Bába A'li Sher who used to sit stark naked; Bába Tawakkul buried in the Nasirabad suburb, Bába Lului buried in Manjhuri Bába, Ahmad Nagori buried near the Nálband mosque, Bába Ladha buried near the Halim wicket, Bába Dhokal buried between the Sháhápur and Delhi gates, Bába Sayyáh buried in Viramgám. There is a thirteenth Bába Kamál Kirmáni about whom authorities are not agreed. Major J. W. Watson, Feb. 4th, 1879.

1 Ahmad Sháh, before establishing Asával as his capital, had to defeat a Bhil or Koli chief who about a year before had risen against his grandfather's government. (Bird, 184, 187). The Bhil would seem to have been a robber and plunderer of highways, not an independent chief, as seven years before (1403) Sultán Muhammad, Sultán Ahmad's father, had made Asával his capital. (Bird, 179). Asával had for long been a place of importance. Here Muhammad Tughlik Sháh (1325-1350) halted during his suppression of the Gujarát mutiny (1347). (Tárikh-i-Firoz Sháhi: Elliot, III. 260). Two hundred years earlier it was (1150) a well peopled, busy, trading, manufacturing and rich town (Jaubert's Edrisi, I. 170, 174, 176). In the eleventh century, Karan king of Anhilváda (1072-1094) made the town his capital, adorned it with two temples, one to Kochrab, the site still known, and the other to Jayanti Devi, and named it Karanávati, Karan's town, Shrinagar, prosperous city, and Rájnagar, king's town. (Rás Mála, 79, 80, 89). But though, like Sultán Ahmad he had to punish the robber Kolis before he made it his capital, Karan was not its founder. In the tenth century Asával was one of the chief places in Gujarát (Al Biruni, 970-1039). Reinaud's Fragments, 121. Elliot's History, I. 66.

2 The Pátan citadel was probably the old Rajput fort called after *Bhadra* or the propitious Káli. Major Watson. The fort was perhaps improved by Sultán Mahmud Begada (1459-1511). See below under 'Bhadar,' p. 275.

3 The Moghal historians (1590-1600) and almost all the European travellers (1610-1700) praise the citadel and the broad streets.

4 Mr. Melvill, who between 1824 and 1826 surveyed Parántij and Modása, was satisfied that, though no trace of a dam remained, the hollow known as the Bokh must be artificial, the work of Sultán Ahmad to add to his new city's water supply. Bom. Gov. Sel. X. 5.

5 Tod's Western India, 227. All the buildings were of stone brought from a great distance (chiefly from Dhrángadra in Káthiáwár and Idar, see below p. 263). Bird, 132. Specially good lime was brought from Idar, and in plaster work, with which the fine buildings, pleasure houses, and tombs were covered, took so fine a polish as to reflect the light like a looking glass. Bird's Mirát-i-Ahmadi, 106.

6 The chief buildings were the City Walls, the Bhadar, and the Triple Gateway; of mosques, Sultán Ahmad's, Haibat Khán's, Syed A'lam's, Malik A'lam's, Jáma, and Sidi Syed's; and of tombs, Sultán Ahmad's and his Queens'.

Chapter XIV.

Places of Interest.

AHMEDABAD.

History.

Ahmedabad Kings, 1411-1572.

Mahmud Begada (1459-1511) repaired its walls,[1] planted its streets with trees, adorned the city and suburbs with splendid buildings,[2] and with much care fostered its traders and craftsmen.[3] So closely did he look after its welfare that if he heard of an empty house or shop he ordered it to be filled.[4] At the close of Mahmud's reign (1511) in spite of the great wealth and size of Chámpáner, Ahmedabad was still greater, very rich and well supplied with many orchards and gardens, walled, and embellished with good streets, squares, and houses.[5]

For sixty years after Mahmud's death (1511-1572) the fortunes of Ahmedabad declined. Bahádur Sháh (1526-1536), when strong and prosperous preferred Chámpáner to Ahmedabad, and, in the disorders that followed his death,[6] the power of the Gujarát kings waned, their revenues fell, and the capital, its trade crippled by Portuguese competition, was impoverished and harassed by the constant quarrels of unruly nobles.[7] In 1571, the year before its capture by Akbar, the city had twelve wards within the walls and others outside. Its chief industries were the manufacture of silk, gold and silver thread, and lac. It yielded a yearly revenue of £155,000 (Rs. 15,50,000).[8]

Moghal Viceroys, 1572-1757.

In 1572, called in by a party of the Gujarát nobles, the Emperor Akbar, meeting with little opposition, entered Ahmedabad (18th

---

1 The date 1486 given in the date-line 'Whoever is within is safe,' (Briggs' Ferishta, IV. 70) would seem to show that Mahmud Begada built the outer wall. But, as the Mirát-i-Ahmadi expressly states that Ahmad built both the fort and the city walls, Mahmud probably strengthened perhaps repaired them. Before building the walls Mahmud is said to have changed the course of the Sábarmati which formerly ran through the Káranj square, between the Bhadar and the Three Gates. Briggs' Cities of Gujaráshtra, 208. This, if done at all, was probably the work of Sultán Ahmad.

2 The chief buildings and works carried out in Ahmedabad between 1441 and 1511 were, under Muhammad II. (1441-1451), Kutb-ud-din's mosque; under Kutb-ud-din (1451-1459), Malik Shábán's mosque, Darya Khán's tomb, the Kánkariya lake, the small Batva shrine, and Ganj Bakhsh's tomb at Sarkhej; and under Mahmud Begada (1459-1511), the Queen's mosque in Sárangpur, Dastur Khán's mosque, Muháfiz Khán's mosque, Dáda Harir's well, Miya Khán Chishti's mosque, Achut Bibi's mosque, Syed Usmán's mosque and tomb, and parts of Sháh A'lam and Batva.

3 During this reign (1466) special mention is made of silver sword handles of Ahmedabad work., Bird's Mirát-i-Ahmadi, 207.

4 Bird's Mirát-i-Ahmadi, 205.

5 Stanley's Barbosa (1514), 58. The houses were of stone and white-washed brick with roofs in the Italian fashion.

6 During Humáyun's very short possession of Gujarát (1535) he appointed his brother A'skari governor of Ahmedabad. Blochmann's Ain-i-Akbari, I. 348.

7 Early in the sixteenth century (1509) Ahmedabad trade began to suffer at the hands of the Portuguese. But it was not till 1538 that, settled at Diu as lords of the sea, the Portuguese secured the greater part of the profits that formerly enriched the merchants of Ahmedabad. Of local events that affected Ahmedabad may be noticed: 1, in 1554 the partition of Gujarát among the nobles, leaving to the nominal king Ahmad Sháh II. (1554-1561). only the city and neighbourhood of Ahmedabad; 2, in 1571 its capture by Chingiz Khán; and 3, its siege by A'laf Khán, till the arrival of Akbar (1572.)

8 Of the total, £5000 (Rs. 50,000) came from cultivation round the city, £100,000 (Rs. 10,00,000) from taxes on vegetables, £30,000 (Rs. 3,00,000) from a coinage tax, and £20,000 (Rs. 2,00,000) from police. The police details were fines, £1500; betel leaf, £5000; cattle market, £3500; lac, £500; wire, £1000; opium, £500; silk, £1800; carriers, £500; messengers, £150; false weights, £500; shops £1500; revenue of the twelve city wards, *purás*, £350; city gate collections, £1300; other wards, *purás*, £1400; confections and other things, £500; total, £20,000. Bird's Mirát i-Ahmadi, 113-114.

Chapter XIV.
Places of Interest.
AHMEDABAD.
History.
Prosperous, 1572-1707.

November 1572), and receiving the submission of its nobles made Gujarát a province of his empire, and appointed a Viceroy. Though easily won, ten years passed before order was established at Ahmedabad. Akbar was but a few months gone, when (1573) the rebel Mirzás,[1] helped by some of the Gujarát nobles, came against Ahmedabad; two years later (1575) at a second siege Muzaffar Husain Mirza all but took the city, and in 1583 Muzaffar the last of the Ahmedabad kings captured Ahmedabad and spoiled it of gold, jewels, and fine cloth.[2] Muzaffar's revolt was soon put down. Mirza Khán, one of Akbar's most rising nobles, led an Imperial army against Ahmedabad, and (22nd January 1584) meeting Muzaffar at Sarkhej, after a hard fought battle, routed his troops and forced him to fly. Raised to be Khán Khánán or head of the nobles, Mirza Khán turned the Sarkhej battle field into a garden, *Fateh Bágh*, the garden of victory, for long one of the chief sights of Ahmedabad.[3] After this victory, though at times disturbed by brawls and riots, Ahmedabad, for more than a century free from outside assault, continued one of the richest cities of the Moghal empire.

State of the City, 1573-1600.

At the close of the sixteenth century the city was large, well formed, and remarkably healthy; most of its houses were built of brick and mortar with tiled roofs; the streets were broad, the chief of them with room enough for ten ox-carriages to drive abreast; and among its public buildings were 1000 stone mosques, each with two large minarets and many wonderful inscriptions. Rich in the produce of every part of the globe, its painters, carvers, inlayers, and workers in silver gold and iron, were famous, its mint was one of four allowed to coin gold,[4] and from its Imperial workshops came masterpieces in cotton, silk, velvet and brocade with astonishing figures and patterns, knots and fashions.[5] The town was on the whole the handsomest in Hindustán, perhaps in the world.[6]

---

1 The Mirzás, Sháh Mirza the grandson, and Ibráhim Husain and Muhammad Husain the younger sons of Muhammad Sultán Mirza, as sprung from their common ancestor Timur the Great, had been treated with great distinction by Humáyun and Akbar. Muzaffar Husain who nearly captured Ahmedabad in 1575 was a son of Ibráhim. Blochmann's Ain-i-Akbari, I. 461-463.

2 Bird's Mirát-i-Ahmadi, 362. Muzaffar, who in 1572 fell into Akbar's hands, escaped from confinement in 1578, and fled to Káthiáwár. Blochmann's Ain-i-Akbari, I. 334.

3 Bird's Mirát-i-Ahmadi, 375. When Muhammad A'li Khán wrote (1748-1762) several of the buildings and remains of the summer house were still to be seen. As Viceroy (1583-1590) the Khán Khánán laboured for the prosperity of the country and the relief of the oppressed (Bird, 375). He was famous for his liberality giving, at the final conquest of Gujarát, his whole property to his soldiers. Blochmann's Ain-i-Akbari, I. 335.

4 The other places were the seat of Government, Bengal, and Kábul. Blochmann's Ain-i-Akbari, I. 31.

5 Blochmann's Ain-i-Akbari, I. 88. Hair weaving, apparently gold and silver thread (ditto, 92), and silk spinning were brought to perfection. The goods for which Ahmedabad would seem to have been specially famous were, brocades, velvets and silk with bars of silver thread (ditto, 92, 93).

6 Ferishta, IV. 14 and Gladwin's Ain-i-Akbari, II. 63. Of the population of the city no estimate has been traced. It is not easy to reconcile the accounts of the size of the city given in Ferishta, the Ain-i-Akbari, and the Mirát-i-Ahmadi. According to the Ain-i-Akbari (1580), there were 360 *purás*, of which only eighty-four were then flourishing (Gladwin, II. 63); according to Ferishta there were, in 1600, 360 *mahallahs*, each surrounded by a wall (Briggs, IV. 14); the Mirát-i-Ahmadi in one passage

Chapter XIV.
Places of Interest.
AHMEDABAD.
History.

In the early years of the seventeenth century Ahmedabad increased in size, its governor (1606-1609) founding a new ward and building a mosque and tomb.[1] A few years later (1613), a company of thirty-two Englishmen under Mr. Aldworth came to Ahmedabad. Early in the following year (April 1614), a house was hired and brokers and servants left to gather goods.[2] At the close of 1617 (December 15th) Sir Thomas Roe, pressing in front of Jahángir's camp, came to Ahmedabad. About three weeks later (January 6th, 1618), the Emperor came, and in due course received his presents from the Company, and gave an audience to a party of English speculators, who, under a certain Richard Steel, had come out with the object of getting contracts for lead pipes.[3] One day (January 13th), some Dutch merchants appeared at court with a great present of China ware, saunders-wood, parrots, and cloves. Asked about the strangers, Roe told the prince, 'they were a nation under the King of England, not welcome in all parts.' To his disgust they were made welcome at Ahmedabad. Roe was asked, as their fellow-subject, to introduce them; their present was received, and they were stationed close to the English.[4] The English were much pleased with Ahmedabad. It was a goodly city as large as London. The walls were high and thick with many gates. Outside were no suburbs; inside broad well-paved streets were lined with trees so high and large that it seemed like entering a wood, the buildings were beautiful, comparable to those of most cities in Asia, the houses were of brick, many of them ridged and tiled. The Viceroy's house was large and stately, of excellent stone, well-squared and put together. Its craftsmen were cunning weavers, carvers, painters, inlayers, and gold and silver embroiderers. Its traders, Pagans, Musalmáns, and Christians, dealt in indigo, cloth, and drugs on so large a scale that, in the busy season (November - April), almost every ten days a caravan of about 200 wagons started for Cambay.[5] This is very unlike the Emperor Jahángir's description of the city, written about the same time (1618). Feverish and oppressed with the heat he found little to admire. 'What beauty or excellence,'

The English, 1613.

The Dutch, 1618.

State of the City, 1618.

(Bird, 311) says, such was once its populous state that it contained 380 *purás*, each *pura* a considerable quarter almost a city; in another passage he mentions twelve city wards and others outside (Bird, 114), and in his detailed account of the city he mentions by name 110 suburbs of which 19 were settled under Moghal rule (see below p. 328). Again Terry (1618) says, without the wall there are no suburbs, (Voyages, 179) and Mandelslo (1638), the suburbs and dependent villages are nearly seven leagues round, (Voyages, 78). Perhaps there is no better explanation of these discrepancies, than the difficulty there always is to draw a line between a city, its suburbs, and the villages on its outskirts. It seems unlikely that under its own kings Ahmedabad was ever so great as it became under the Moghal viceroys.

1 This Viceroy was Syed Murtaza, Shaikh Farid-i-Bukhári (1606-1609). The new ward was in his honour called the Bukhári *mahallah*, the mosque and tomb were in honour of Wajih-ud-din (died 1580). Blochmann's Ain-i-Akbari, I. 415.

2 Orme's Historical Fragments, 334-336.

3 Roe, in Kerr IX. 354. Roe, who found Steel 'high in his conceit and forgetful of respect,' disapproved of the project thinking, chiefly from the cost of land carriage, that an attempt to advance the sale of lead was money and labour thrown away.

4 Roe, in Kerr IX. 364, 365.

5 The travellers were Finch and Nicholas Ufflet (1611) Harris I. 89 and Kerr VIII. 301; Nicholas Whittington (1613) Kerr IX. 127, and Terry, Voyage to East India (1618), 179, 180.

Chapter XIV.
Places of Interest.
AHMEDABAD.
History.

he complains, 'can the founder of the city have seen in this wretched land with its dust-laden air, its hot winds, its dry river-bed, its brackish nasty water, and its thorn-covered suburbs.' At first he called it Dust city, *Gardabad*, afterwards as his dislike grew stronger Simoom town, *Samumistán*, Thorny town, *Zakumdár*, ending, perhaps when he heard the plague[1] had broken out, in the names, Sick town, *Bimáristán* and Hell city, *Jahánnamabad*. During part of Jahángir's nine months' stay in Ahmedabad, his favourite wife Nur Jahán governed the city.[2] A record of his visit remains in the Jahángir mint (p. 280) which he either built or renewed.[3]

State of the City, 1626.

In 1616 Prince Khurram, afterwards (1627-1658) the Emperor Sháh Jahán, was made Viceroy. During his government (1616-1622), among other improvements, he built a palace in the Sháhi Bág and royal baths in the Bhadar. Shortly after (1626), the English traveller Sir Thomas Herbert describes Ahmedabad as 'the megapolis of Gujarát, circled by a strong wall with many large and comely streets, shops full of aromatic gums, perfumes and spices, silks, cottons, calicoes and choice Indian and China rarities, owned and sold by the abstemious Banians who here surpass for number the other inhabitants.'[4] In 1629 and 1630 Ahmedabad passed through two years of famine so severe that its streets were blocked by the dying, and those who could move, wandered to other countries. For the poor and destitute soup kitchens, *langar-khánás*, were established and a sum of £5000 (Rs. 50,000) distributed.[5] The famine over, the city soon regained its prosperity. Mandelslo,[6] in 1638, describes its craftsmen as famous for their work in steel, gold, ivory, enamel, mother of pearl, paper, lac, bone, silk, and cotton, and its merchants as dealing in sugarcandy, cumin, honey, lac, opium, cotton, borax, dry and preserved ginger and other sweets, myrobalans, saltpetre and sal ammoniac, diamonds from Bijápur, ambergris, and musk.

State of the City, 1638.

During the next thirty years (1640-1670), the fortunes of Ahmedabad were at their best. A succession of able governors maintained order throughout the country, protected foreign

---

1 Wákiát-i-Jahángiri: Elliot's History, VI. 358-359. Jahángir thought he had escaped the pestilence, *waba*, that had for some time been raging at Agra. But it appeared at Ahmedabad and at least to the English was most deadly. Terry, 227. Details have been given under the head Health (p. 219). In spite of his abuse of the place Jahángir had some share of amusement in Ahmedabad. One night, Roe reports, after a party at a garden outside of the city, the Emperor drove his favourite Nur Mahál in an open bullock wagon himself acting as wagoner. Kerr, IX. 363. Another night, as he himself tells, he held a market in the courtyard of his palace where jewels, inlaid articles, implements, and all kinds of cloth and stuffs, with plenty of lighted lanterns before each shop, made a novel show. Wákiát-i-Jahángiri: Elliot, VI. 361.

2 Perron's Zend Avesta I. CCLXVII and DXIV, Briggs' Cities of Gujaráshtra, 224. A coin or medal was struck in Nur Jahán's honour with the inscription 'In the thirteenth of the installation (1028 H. 1618) Nur Jahán wife of the King Jahángir, son of the King Akbar, lady governor of Ahmedabad.'

3 Briggs' Cities of Gujaráshtra, 224.

4 Travels, 66. Herbert speaks from hearsay. He was only a fortnight in Gujarát (27th November to 17th December) and spent all that time at Surat. Della Valle, three years before (1623) found the streets broad, beautiful and straight, but from the deep dust difficult for men to go on foot or horses to go fast. Della Valle, Letters, III. 91-92.

5 Bádsháh-náma in Elliot's History, VII. 24, 25. 6 Voyages, 80.

merchants, and adorning the city with new buildings, developed its population, industries, and trade.[1] Of the city during this time of prosperity (February, 1666), Thevenot, the French traveller, has left the following account. It was so full of trees that from a height it seemed a green forest. From the south the approach, lined by avenues of trees, lay past walled gardens, houses, and well built tombs, then through a gateway[2] into a street of houses leading straight to the city walls. Including the suburbs the city was about 4½ miles long.[3] Its walls were strong, in good repair, and well guarded. Inside, the streets were broad, the main street at least thirty paces across, ending towards the west in three great gateways. These opened into the king's plain, 700 yards long by 400 broad. To the south was a large travellers' rest-house or caravanserai, with a battery of six or seven guns, the front ornamented with overhanging pillared balconies of finely cut stone. In the middle of the plain was a high tree with a target hung from its top, and scattered over the plain were many small square buildings, about nine feet high where the police magistrate, *kotvál*, tried offenders. Across the square from the Three Gateways was the citadel, as large as a little town, but with no good rooms, surrounded by a well cut stone wall, and entered by a strong gate flanked by high towers. Over the whole city were many mosques, tombs, and palaces, public baths and reservoirs, fountains, and water courses.[4] The chief articles of trade were, of raw produce, indigo, sugared and raw ginger, sugar, cumin, lac, myrobalans, tamarinds, opium, saltpetre and honey, and of manufactured goods, satin, velvet, taffeta, cloth of gold, silk and wool, silk carpets and cotton fabrics some made in Gujarát some brought from Lahore and Delhi.[5] After Thevenot's visit the city, though for several years (1683-1689) afflicted by attacks of pestilence,[6] seems to have lost little in wealth. In 1695 it was the head-quarters of manufactures, 'the greatest city in India, nothing inferior to Venice for rich silks and gold stuffs curiously wrought with birds and flowers.'[7]

State of the City, 1666.

With the close of Aurangzeb's (1707) reign began a period of disorder. The Maráthás, who for about half a century had caused

Disorder, 1707-1725.

---

1 The most distinguished Viceroys were A'zam Khán (1635-1642), Aurangzeb (1644-1646), and Murád Bakhsh (1654-1657). During this time the only disorder was in 1644 a riot between Hindus and Musalmáns in which under Aurangzeb's orders the temple of Chintáman near Saraspur was mutilated. Details of this temple are given below, p. 285.

2 Thevenot (V. 23) calls the gate a *fausse porte*. It was perhaps, as is still the case in many *pols*, a gateway without any walls.

3 Thevenot, V. 23.

4 Thevenot, V. 25. Forbes' Or. Mem. III. 127.

5 Thevenot, V. 35; and Tavernier in Harris, II. 373. At this time there were in the city Armenian and Abyssinian churches and a Jewish synagogue. Ogilby's Atlas (1680), V. 209.

6 Muntakhab-ul-Lubáb: Elliot's History, VII. 337.

7 Gemelli Careri: Churchill, IV. 189. This seems exaggerated, as about the same time (1672-1681) Fryer makes Delhi, Lahore and Agra the three chief cities of India. New Account, 199. In the beginning of the eighteenth century (1700-1720), Hamilton calls Ahmedabad a great city, in size and wealth little inferior to the best towns in Europe, yielding a revenue ten times that of Surat or about '£162,500 (Rs. 13,00,000).' New Account, I. 144,149.

Chapter XIV.
Places of Interest.
AHMEDABAD.
History.
Disorder, 1707-1725.

mischief and damage in south Gujarát, on hearing of the Emperor's death sent an expedition against Ahmedabad. Under the command of Báláji Vishvanáth they passed the Imperial troops in the Panch Maháls, plundered as far as Batva within five miles of the city, and were only bought off by the payment of £21,000 (Rs. 2,10,000).[1] In the city the next years were marked by riots and disturbance. In 1709 an order came from the new Emperor Bahádur Sháh (1707-1712), that in the public prayers, among the attributes of the Khalif A'li, the Shia epithet *wasi* or heir should be introduced. This order caused great discontent among the Ahmedabad Sunnis. They warned the reader not to use the word *wasi* again, and, as he persisted in obeying orders, on the next occasion they dragged him from the pulpit and stabbed him to death.[2] Three or four years later (1713-1714) another disturbance broke out, this time between the Hindus and Musalmáns. A Hindu insisting on burning the *Holi* near some Musalmán houses, the Muhammadans retaliated by killing a cow. On this the Hindus seized a lad the son of a butcher and killed him. Then the Musalmáns especially the Afgháns rose, sacked, and burned shops. They attacked a rich jeweller, Kapurchand, who defended his ward, *pol*, with matchlock men and killed several of the rioters. For three or four days work was at a standstill.[3] Next year (1715) in the city the riots were renewed, shops were plundered and much mischief done,[4] and outside (1716), the Kolis and Káthis grew so bold and presumptuous as to put a stop to trade.[5] During the next ten years (1720-1730), the rivalries of the Imperial nobles were the cause of much misery at Ahmedabad. In 1720 Anopsingh Bhandári the deputy viceroy, committed many oppressive acts murdering Kapurchand Bhansáli, one of the leading merchants. So unpopular was he that when news reached the city that Shuját Khán had been chosen to succeed him, the people of the town attacked the Bhadar and all but took Anopsingh's life. Then there followed a struggle between Hámid Khán, the Nizám's deputy helped by the Maráthás, and Sarbaland Khán the Viceroy and his deputy. During this contest Ahmedabad was pillaged by the Maráthás, the city more than once taken and retaken, and even when the Viceroy's power was established in name, he was practically besieged in the city by the crowds of Marátha horse who ravaged the country up to the gates. The revenues cut off, to pay their troops the Imperial officers granting orders on bankers, seized them, put them in prison, and tortured them till they paid. Reduced to wretchedness many merchants, traders, and artisans left the city and wandered into foreign parts.[6] Though successful against the Maráthás the Viceroy had to agree to give them a share

---

1 Watson's Gujarát History, 89. 2 Muntakhab-ul-Lubáb : Elliot, VII. 421.
3 Muntakhab-ul-Lubáb : Elliot, VII. 454-456. 4 Watson's Gujarát History, 91.
5 Hamilton's New Account, I. 145.
6 Watson's Gujarát History, 94-101. Muntakhab-ul-Lubáb in Elliot, VII. 527-530. The details were ; in 1723 Mubáriz-ul-Mulk Viceroy, chose Shuját Khán his deputy at Ahmedabad, and Hámid Khán, then holding Ahmedabad for the Nizám the former Viceroy, retired ; Shuját Khán took his place, and went to collect tribute, then Hámid returned, defeated and killed Shuját and held all the land about Ahmedabad. Rustam Khán, Shuját's brother, came against Hámid. Hámid won over the Maráthás to his side,

dly off for money had, in 1726, and again in
ıcrease taxation that the city rose in revolt.[1]
0) Mubáriz-ul-Mulk the Viceroy, superseded
hesingh of Jodhpur, refused to give up the
walls fought a most closely contested battle.[2]
ent of Abhesingh, Ahmedabad remained
3 a Marátha army coming against the city
the payment of a large sum of money.[3]

pute arose among the Imperial officers.
nd his appointment cancelled in favour
ansingh Bhandári. Refusing to obey
by the promise of half of the revenues
bad, won Dámáji Gáikwár to his side,
a siege of some months, captured it

Joint Rule, 1738-1753.

ity was divided between Momin
ngoji,[4] and this joint rule lasted

mán and Gáikwár management
rbance. Within the city Momin
vithout dispute the chief place
time after Momin Khán's death,
of Fidá-ud-din Khán. It was
and he, in spite of the attempts
in Khán II. (1743), and Fakhr-
Viceroys, held it during the
he cunning and greed of the
and disorder. Driven out in
orced themselves back. Again
em, kept them out of power for
eir leader Rangoji a prisoner.
ext year (1744) returned and
ower. Acknowledging their
when Dámáji Gáikwár was in
at of the city. For two years
752 the Peshwa, owning now
, sent Pándurang Pandit to
Jawán succeeded in keeping
weakness he admitted their

---

ged Ahmedabad. Then the Viceroy
1725). For his services in stopping
n ancestor of the present Nagar Seth,
nour. Briggs (Cities of Gujaráshtra,
usha saved Ahmedabad, was not the
bly misled him, 1725 being in Hindu
.

he city including the command of the
r closed, also called Mahudha. A'stodiya.

Chapter XIV.

Places of Interest.

AHMEDABAD.

History.

Joint Rule, 1738-1753.

claim to share the revenue and allowed their town. Next year (1753) when Jawán was revenue, the Peshwa and Gáikwár with from 3 suddenly appearing in Gujarát, pressed north people, leaving the suburbs, fled within the wa unopposed invested the city with their 30,0 blockading the north, Gopál Hari the east, ar Raghunáth Ráo watching the south and west. sent to Jawán as he moved about the cour One at last found him and starting with passed during the night through the Ma the city. Cheering the garrison they d foiling an attempt to surprise and Their deputies turned out of the city strengthened from outside, the Ma small. But Jawán was badly off fo the townspeople, he could not find were agreed on, and, giving Jawá the Maráthás in April 1753 ente

Taken by the Maráthás, 1753.

Taken by Momin Khán II. 1755.

The siege had done the deserted at the approach of the The excessive greed of the M caused great discontent. Knc rain had made great breaches advanced from Cambay. Sc through one of the breaches, rushing in drove out the Maráth well defended English factory Momin Khán to surrender, the For more than a year the siege Shambhurám a Nágar Bráhmar times dashing out in the n But the besieged were badly behind, and the people alread in numbers. The copper po in pay for a time. But at la holding out for a year and a (Rs. 1,00,000), gave up the

Re-taken by the Maráthás, 1757.

Marátha Rule, 1757-1817.

Established in Ahmedaba revenues, the Peshwa, excep that his deputy remained i revenue was fairly set apart of the city. For nearly twe Marátha hands. Then in 17 General Goddard, acting in alli the Poona Government, advan strongly garrisoned,[3] seeing n

Taken by the British, 1780.

1 Watson's Gujarát History, 119-141.

3 The garrison had among others, 60

my's fire, General Goddard (February 12th) opened the evening of the second day had, near the Khán he south-west[1] corner of the city wall, made a h. Two days passed waiting for an offer of o offer came, and on the morning of the fifteenth, f Colonel Hartley, with a forlorn hope of volunteers division headed by Serjeant Fridge, the storming he breach. The struggle was fierce, the garrison r 300 of their number and 106 of their assailants e over, the British troops showed the greatest onduct. There was no plundering and no excess. ants lost their lives.[2] A detachment of British rrison the citadel, and the city was handed over to Forbes, who visited it about a year later (March ow Ahmedabad had fallen. Near the city the s of desolation. There were trees and fields, uses and no sign of life except tigers, hyenas, alls were broken down in many places. The hout trees or pavement and much of the city . The public buildings were in decay and re Musalmán splendour was soiled by Marátha The population was little over 100,000 souls.[3] nting, brocade weaving, and lacquered work were few signs of trade or manufactures. , and desolation.[4]

State of the City, 1781.

ity for two years. Under the terms of the bruary 1783) Ahmedabad was restored to interest being, as before, limited to one-half ommand of one of the gates. For some manufactures in 1789 being 'incomparably .'[5] Then the 1790 famine caused fresh ter only a quarter of th[illegible] within [illegible] time (1798-18[illegible]

Chapter XIV.
Places of Interest.

AHMEDABAD.
History.
Marátha Rule, 1757-1817.
Pestilence, 1813.

for a yearly payment of £50,000 (Rs. 5,00,000), a
his share of the Gujarát revenues.[1] This arran
for ten years in 1804, continued in force till 18
years of the lease were disastrous. Near the close
management, the city, which had considerably reco
visited by a most terrible famine and pestilence.
diseased and famine-stricken people crowded in
Káthiáwár and the crops were much damaged by l
of scarcity was followed by a failure of rain. G
famine pitch, and the strangers sickly and star
diseased cattle, died in crowds and were left
pestilence broke out and raged with such violen
of the city are said to have died, and though house
for their timber the bodies of the dead had to be le
the Gáikwár's management had been success
maintained and the population of the city incr
pressed the Poona court to renew the lease and
But the Peshwa anxious to strengthen his com
refused. The appointment of Sar-Subhedá
favourite Trimbakji Dengla who sending tr
possession in the Peshwa's name (23rd Octobe
was most disastrous. Between the Pesh
keenest ill-feeling prevailed as to the divisi
and the Peshwa's officer anxious only to
revenue by every sort of iniquity.[4] This
brought to an end in 1817. In that year
treaty of Poona the Peshwa agreed, for a y
(Rs. 4,50,000), to let in perpetuity to t
Ahmedabad. Under the same treaty the
revenue from the Ahmedabad farm, shou
to the British as part of the British
revenues.[5] A few months later (Nove
at he should, in
ights he

ll. There was a great scarcity of coin. ten to twenty-five per cent of their value, more heavily weighted, the workman he work, and the manufactured goods oon after the transfer (June, 1819) arthquake. The shaking ny houses were destroyed, et at a marriage feast.[1] The of the town dues, gave a great a time busy and prosperous. e from 1817 to about 88,000 in 1824.[2] t following ye special cess was levied and at a 0 (Rs. 2,50,000) t city walls were repaired. About me a cantonment was established on a site to the north of chosen in 1830 by Sir John Malcolm. These (1825-1832), ough some of them years of agricultural depression and dull trade, brought a further increase of population to 90,000.[3] In the next ten years the state of the city improved. The population rose (1846) to about 95,000, and Hatising's temple and other buildings of that time (1844-1846) show that some of the city merchants were possessed of very great wealth.[4] The public funds available after the walls were finished were made use of for municipal purposes. Streets were widened and thoroughfares watered.[5] During the following years the improvement continued. Ahmedabad's gold, silk, and carved-wood work again (1855) became famous, and its merchants and brokers enjoyed a name for liberality, wealth and enlightenment.[6]

Mutiny Year, 1857.

During the 1857 mutinies, the large needy and unsettled Musalmán population of Ahmedabad, was, in the absence of European troops, a cause of anxiety to Government. Hasan Khán Batangi, a Musalmán gentleman of good family, was ordered to enlist, from the dangerous classes, 2000 infantry and 150 horse. Their employment, though it added little to the military strength of the Government, had the effect of keeping the men out of mischief till the crisis was over. Had it not been for this politic measure, and the severe example made of the mutineers of the Gujarát Horse, and of the 2nd Grenadier Regiment, the city would probably have been plundered. It was known that the Native officers of the Gujarát Horse had been tampering with the arsenal guard, and so general was the fear of disturbance that traders buried their treasure and employed parties of Rajputs and Kolis for the defence of their houses.

---

1 Trans. Bom. Geo. Soc. XVII. 292. Two years later at 41 minutes past 2 P.M. on the 13th August 1821 an earthquake shock lasted for thirty seconds. A slight tremulous motion, it was enough to swing lamps and rock chairs. The day was cloudy and cool without any special atmospheric phenomena. As. Journal, XIII. (1822), 293. The only earthquake shock since recorded in Ahmedabad was in 1864 (April 29). It is described as a smart shock travelling from south to north, and lasting for 20 seconds with a noise like the rolling of a heavy carriage on a hard road. Trans. Bom. Geo. Soc. XVII. 294.

2 See below p. 293.

3 Briggs' Cities of Gujaráshtra, 209.

4 Briggs' Cities of Gujaráshtra, 232.

5 Briggs' Cities of Gujaráshtra, 209.

6 Dr. Buist : Bom. Geo. Soc. XIII. 62.

Chapter XIV.
Places of Interest.
AHMEDABAD.
History.
British Rule, 1817-1879.

On the arrival of the 86th Regiment (Ja
disarmed, when 25,000 arms chiefly m
surrendered.[1]

The eight years after the mutiny (
prosperity. The American war (
time (1864) the opening of
with wealth, and though i
money remained to keep t
sinking to its former level.

Since 1866 Ahmedabad has n 1868 a
greatly damaged by floods, and e, in 1877, suff
Of the floods details have been gi in Chapter I.
fires, the first on the 27th January was caused by an ex
gunpowder in a Bohora's shop. This shop, in which we
than 500 pounds of gunpowder, was about ten at night found
be on fire. The gunpowder exploded burning five shops and
killing eighty-eight people.[2] Two months later, on the night of the
24th March, a fire broke out in the chief enclosure, *pol*, of the
Sárangpur division. The street was very narrow and lined with
four-story high houses. It was only with the greatest difficulty that
the engines could be brought to play on the fire. Military help was
called in and by ten next morning the fire was got under, but not
until ninety-four houses had been burned and property worth £60,000
(Rs. 6,00,000) destroyed.[3] At present (1878) its lower classes are
suffering from the long continued high prices of food-grains, and its
upper classes from the dullness of trade and losses in Bombay mills
Still during the five years ending 1877, while much has been done
to improve the appearance and health of the city, its trade has steadily
risen,[4] and its steam cotton spinning and weaving mills, besides
cheapening cloth, give well paid employment to about 2000 of its
poorer inhabitants.[5]

Section II.—Objects of Interest.[6]

Musalmán Architecture.

Except an old Hindu well, the Dutch tombs, and some modern

---

1 The Hon. L. R. Ashburner, C.S.I., Feb. 20th, 1879.
2 Mr. J. F. Fernandez, Huzur Deputy Collector.
3 Police Commissioner N. D., No. 627 of 7th April 1877.
4 From 57,262 tons in 1873 to 82,314 tons in 1877.
5 The account of the present state of Ahmedabad, its lodges, temples, fairs, trade and manufactures, and the 1879 city-divisions and suburbs, owes much of its fullness to materials supplied by Mr. J. F. Fernandez, Huzur Deputy Collector. The City Survey officer, Mr. A. W. Waite, has also helped in preparing the city map and in supplying a variety of details. On population and manufactures, Ráo Bahádur Bechardás Ambáidás, C.S.I., has kindly given much useful information.
6 In compiling this section free use has been made of Forbes' Oriental Memoirs (1813); of the 1824 City Survey Records; of Briggs' Cities of Gujaráshtra (1849); of Mr. Burgess' Notes on Gujarát (1870); of Capt. Lyon's Notes on Photographs (1871); and of Mr. Burgess' Archæological Survey Report for 1874-75. But most of the information, architectural remarks, and criticisms, are taken from Messrs. T. C. Hope and Fergusson's work on the Architecture of Ahmedabad (1866).

, all buildings of architectural interest in Ahmedabad
dan.

e or two, as Darya Khán's (p. 284) and A'zam Khán's
bs, are rough and commonplace, and some as Sháh
n's (p. 278) tomb, and the Sháhi Bág (p. 283) and A'zam
ces (p. 274), are of late date (1600-1700). But almost all
lass remains have the special interest of representing a
e of architecture. The date of this, 'the most elegant and
of Indo-Saracenic styles,'[1] corresponds with the century
(1413-1573) of independent Ahmedabad rule. Starting
efore ten years were over, the builders had gained enough
confidence to raise the Jáma mosque, still one of the
st in the city. The Ráni Asni, or as it is generally called
Sipri mosque, the gem of Ahmedabad, bears the date 1514.
the style was then at its best. But during the next sixty
fell off but little, for at the time of the Moghal conquest
two mosques[2] were in hand whose half finished remains are
the chief ornaments of the city.

pite of the vigour and religious zeal of its kings; the strong
of foreign blood that constant dealings with Western Asia
rought into the province; and the taste and talent of the
d strangers at its court, so great was the building skill of
atives of Gujarát, that its Muhammadan architecture is, in
ruction and detail, the most Hindu of Indo-Saracenic styles.[3]
mestic buildings, the palaces, taking Mahmud Begada's Sarkhej
e as an example, are built without arches entirely in the pillared
flat Hindu style. In civil buildings, except that tracery takes
e place of images, the beautifully designed step wells and many-
ided reservoirs with flights of stone steps and richly carved
utflow and inflow sluices, are almost purely Hindu.[4] In religious

---

1 Fergusson's Hist. of Arch. III. 521, 526, 527.

2 The Sháhápur mosque, p. 279 and the Bába Lului mosque, p. 290.

3 Fergusson's Hist. of Arch. III. 527. Of the materials used in the Ahmedabad buildings part of the sandstone came from Ahmednagar 60 miles to the north-east of Ahmedabad, and the rest, a better stone, from Dhrángadra in Káthiáwár. Of ornamental stones, besides those brought from the ruins of Chandrávati and Anhilváda, a fine white marble came from Makrán about 35 miles north of Ajmir; an inferior white marble with yellow and black blotches from a quarry about five miles north of Amba Bhaváni; an ochre or yellow marble from Jesalmir, and a poorer yellow from Pálitána; blue marble from Jeypur; black slate, that took a brilliant polish and was often thought to be marble, from Dhrángadra; and a mottled yellow stone from Dakiváda in Cutch. Briggs' Cities of Gujaráshtra, 260-262. Of the workmen some were natives of Gujarát, and others, according to a common Ahmedabad story, of Málwa; some of them were Hindus and others converts to Islám. Among them were skilled master builders. Of the class of men who guided and directed the builders no reference has been traced. But it seems probable that, as in Egypt (Lane's Modern Egyptians, 578, note 1), the execution of the work was generally entrusted to overseers, sometimes military or civil servants of Government, sometimes Kázis, who employed workmen skilled in every branch of the art.

4 Nowhere, says Mr. Fergusson, did the people of Ahmedabad show themselves better architects than in these useful works. It was a necessity of their nature that every object should be ornamental and their success was as great as in their mosques and palaces. Hist. of Arch. III. 537. Except for the want of images, and that in the Sarkhej waste-weir there is one large Musalmán arch, the Kánkariya and Sarkhej lakes are, in style, purely Hindu.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Musalmán Architecture.

buildings there was more change. Though no class o monuments could be used as Musalmán tombs, the dome porches of Hindu temples were easily made to serve This, in its simplest form, was an octagonal dome s twelve pillars with, according to the size of the building, added on every side. Unlike the diagonal arrangemen porches, the Ahmedabad tomb was a square with entra centres of the sides. Where many pillars were used arrangement became somewhat monotonous, though t most cases relieved by screens of finely cut open stone filling the spaces between the pillars. Late in the best Ahmedabad art, to the great increase of size, large piers a took the place of pillars and flat roofs. Either because arched Batva mausoleum was never finished or because it f is, in the strictly Ahmedabad period, no example of this sty the arched tomb of Mir Abu Turáb, built in this style in 15 after the Moghal conquest, is most successful and pleasing.

Not only from their superior richness and beauty, but becaus skill with which they blend local Hindu practice with foreig and ideas, the most interesting of the buildings are the mo In spite of the widely differing character of their places of worsh dark Hindu shrine where only one or two can enter, and the well lit hall where the whole congregation of the faithful may a pillared Gujarát temple with its courtyard, porches, and colonn can, with ease, be turned into a mosque. The chief cell an porch taken from the middle of the court, and the entrances o surrounding cells built up, there remains the typical mosque, courtyard girt with a double colonnade. For the remaining featu the important Mecca wall, all that is wanted is to raise there the tall porch pillars and dome with, if they are to be had, a smaller dome on either side.[2] Mosques had with success been made afte this fashion in Pátan at the close of the thirteenth, and in Cambay during the fourteenth centuries.[3] But, as far as is known, the early Gujarát mosque builders were either foreign merchants working in foreign style, or conquerors satisfied with re-arranging Hindu materials. It was left for the Ahmedabad kings, and for the learned men that adorned their courts, to work out a style of building Hindu in detail, but with a largeness and freeness of plan and outline which the Hindu temples want.[4] The progress of the style can be traced from the first rough attempts (1413-1423) to draw a screen of plain Musalmán arches in front of the rearranged

1 Forbes (Rás Mála, 1856, II. 183) gives an engraving of a Gujarát Rajpu funeral monument, a little domed canopy supported by four columns.

2 Fergusson's Hist. of Arch. III. 264.

3 Alif Khán (1297) built the Jáma mosque at Pátan of white marble with so many pillars that the common people often made a mistake in counting them. In the middle of the eighteenth century it was still a wonderful and noble building. Bird's Mirát-i-Ahmadi, 163. Imrár bin Ahmad Kajiráni built a Jáma mosque at Cambay in 1325, inferior in size only to the Ahmedabad Jáma mosque, the interior all borrowed from Jain temples. Fergusson's Hist. of Arch. III. 537. The foreign Musalmán merchants had mosques at Cambay and Anhilváda. But except that they had minarets (see below p. 266) nothing of their style is known.

4 Fergusson's Hist. of Arch. III. 527.

Chapter XIV.

Places of Interest.

AHMEDABAD.

Musalmán Architecture.

Peculiarities.

Hindu pillars; through a time (1450-1460) when almost all that was foreign was given up and the whole building was Hindu in plan and detail, till, better blended than formerly with the Hindu, the Musalmán element again appears and continues in use up to the close of the Ahmedabad dynasty.[1]

In three respects, the way they are lighted, the delicacy of their traceries, and their minarets, the Ahmedabad mosques differ, both from the local Hindu, and from the other styles of Indo-Saracenic architecture.

Lighting.

By making the central dome higher than the side domes; by setting a double row of dwarf columns on the side roofs; and by building in front of the columns a richly carved balustrade and sometimes a most delicately cut stone screen, a clerestory was formed through which, with perfect ventilation, a subdued light passed into the central compartment.

Traceries.

The forms of tracery used in the Ahmedabad mosques will 'as ornaments compare with those of any age or any land.'[2] They are of two kinds, screens of open cut stone, filling arches and spaces between pillars, and in minarets the arched tracery panels that take the place of the image niches of Hindu temple towers.

Minarets.

Their minarets, the only minarets that in beauty of outline and richness of detail surpass those of Cairo,[3] are the chief glory of the Ahmedabad mosques. The Ahmedabad minaret is part of the mosque, built into its wall. In all but the worst examples the lines of the tower start from the ground. The tower, with beautifully broken outline, richly ornamented with arched panels of trellis work and belts of varied tracery, stands out buttress-like from the ground to the mosque roof, relieving its flat front wall. Above the roof it rises a round slightly-tapering tower, relieved by galleries supported by most richly carved brackets and surrounded by delicately cut balustrades, and ending in a conical top of varied design. Though only at Sarkhej and Batva mosques were built without minarets, the towers of a few others were either never finished or have fallen.[4] Those that remain, always in pairs,[5] stand in most

---

[1] The earliest mosques, those with no attempt to blend the Musalmán and the Hindu elements, are four: Ahmad Sháh's, 1414; Haibat Khán's, 1414; Syed A'lam's, 1420; and Malik A'lam's, 1422. Then comes the Jáma mosque, 1424, where minarets and arched windows are successfully combined with flat Hindu aisles and interior. After this, in the mixed style of the Jáma mosque, are the Mirzápur mosque, 1431; Sidi Syed's, 1443; and Sultán Kutb-ud-din's, 1446. At the same time a new, purely flat and Hindu variety, admirably simple and uniform, was tried at Sarkhej, 1445, and at Batva, 1452, and later on with the addition of end-minarets in the Syed Usmán mosque, 1460; and the Ráni Asni or Sipri mosque in 1514, the last and most perfect specimen of its class. Meanwhile the mixed style was kept up in Miya Khán Chishti's mosque, 1465; in Muháfiz Khán's mosque and Achut Bibi's mosque both about 1470, the last blending most successfully the flat and the arched styles. In 1572, two very beautiful examples of the mixed style, the Sháháp ur and Bába Lului's mosques, remained unfinished.

[2] Fergusson's Hist. of Arch. III. 533.

[3] Fergusson's Hist. of Arch. III. 534.

[4] The minarets of the Sháháp ur and Bába Lului's mosques, begun about 1560, were never finished; those of the Jáma (1424), the Queen's Mirzápur, (1431), the Kutub Sháh (1446), and the Achut Bibi mosques (1469), have either partly or altogether fallen.

[5] Achut Bibi's mosque (1469) had once seven minarets, three at the outer entrance

Chapter XIV.
Places of Interest.
AHMEDABAD.
Musalmán Architecture.

cases on either side of the main door. In four mosques[1] the minarets are at the ends of the front face, and in two, Usmán's and Ráni Asni's, they are purely ornamental with no staircase or opening from which the call to prayer can be sounded. In the earliest mosques, Ahmad Sháh's (1414) and Haibat Khán's (1414), the minarets, built on the roof, rise short plain and ugly, little better than chimney pots. The design was soon improved. A few years later in Syed A'lam's mosque, the lines of the minaret, instead of stopping at the roof, are carried to the ground. Later on, the ornament grows richer and is better spread, the panels are larger and more clearly arched, and the tracery is freer and lighter.

Though in Egypt, more than 250 years earlier, the mosque-minaret had reached a very high degree of perfection,[2] the Ahmedabad would seem to be the first of Indo-Saracenic styles to use the minaret as part of the mosque.[3] Under the Ghazni dynasty (975-1139), and, except an unsuccessful attempt in the Ajmir mosque, under the Pathán kings of Delhi (1192-1554) minarets were victory pillars not mosque-towers. In Jaunpur (1397-1478), the mosque-minaret was as little known as at Delhi, and there were no mosque-minarets at Gaur (1203-1573), Mándu (1401-1568), or Kalburgah (1347-1609).[4] The Ahmedabad kings may have owed the suggestion to one of the learned strangers from western Asia. But the details and the whole character of the tower are Hindu, in some respects closely resembling the second Chitor victory pillar,[5] and more generally recalling the base of a Gujarát Hindu temple tower.[6]

City Buildings.

The objects of interest form two main groups, those within, and those without the city walls. Beginning with the city buildings, the simplest order seems to be to start with those seen from the railway

---

of the enclosure, two at the inner, and one on either side of the chief door of the mosque. All of these, except the stumps of the mosque towers, have fallen. As far as is known the Jáma mosque at Chámpáner with six minarets, one at each corner of the courtyard and one on each side of the main gate, is the only Gujarát mosque with more than two minarets.

1 Usmán's, (1460); Sháh A'lam's, (1480); Ráni Asni's, (1514); and Muhammad Ghaus', (1562).

2 Fergusson's Hist. of Arch. II. 387.

3 Two passages would seem to show that there were minarets in Gujarát before the days of the Ahmedabad Sultáns. In the twelfth century the foreign Musalmán merchants of Cambay had a mosque and a minaret from which the call to prayer was sounded. This was destroyed in a riot; rebuilt by Sidh Ráj (1094-1143); again destroyed by the Bálás (about 1220), and soon after restored with four towers and golden cupolas by a certain Syed Sharaf Tamin. (Muhammad Ufi (1211-1235) in Elliot's Hist. II. 162-164). Again Alif Khán (1297) is said to have built a mosque with minárs at Pátan. (Bird's Mirát-i-Ahmadi, 158). But this seems doubtful; in the detailed account of the Pátan mosque there is no mention of minarets. (Ditto, 163).

4 Fergusson's Hist. of Arch. III. 497, 512, 518, 550, 555.

5 This was built in 1439 a few years before the close of the Gujarát Sultán Ahmad I.'s reign. A woodcut of the tower is given by Fergusson, III. 253.

6 The bases of the Ahmedabad minarets are, except for the change from images to tracery, elongated copies of the perpendicular parts of the basements of Hindu temples (Ferg. Hist. Arch. III. 532). So also Forbes; the minarets of Ahmedabad mosques, if, for their arched foliated panels, idol-sculptured alto-reliefs are substituted, are on a small scale perfect representations of the two stories of a shrine tower to which the imagination can easily add a curvilinear spire. Bom. Quar. Rev. V. 325.

station, and, following the main line of road from the station south-west across the city to the Bhadar or citadel, to divide the city into two, one-half to the left or south, the other to the right or north of the main road.

The buildings seen from the railway station, as the train reaches Ahmedabad, are Sidi Bashir's, and the Railway Station mosques.

Sidi Bashir's Mosque.

The remains of Sidi Bashir's mosque and tomb lie to the south-west of the railway station. The age of the mosque is doubtful. It seems to have been built either by Sidi Bashir, a slave of Sultán Ahmad I. whose tomb lies close by; or by Malik Sárang, one of Mahmud Begada's nobles, who founded a now deserted Sárangpur suburb. In style it is mixed Hindu and Musalmán much like Miya Khán Chishti's (p. 284) mosque built in 1465. Only the minarets and arched central gateway remain; the body of the building was destroyed in 1753 during the struggle between the Maráthás and Jawán Mard Khán.

Railway Station Mosque.

On the left hand side, as the train enters the station, are the two tallest minarets in Ahmedabad. All traces of their mosque,[1] and the memory of its name and date are gone. The style and material of the minarets point to the close of Mahmud Begada's reign (1511), or perhaps rather later. Though much damaged, especially near the foot, the stairs inside the minarets may still be used.

City Walls.

On the way to the city the next object of interest is the City Walls. These, built by Sultán Ahmad I. in 1412, were, in 1486, so strengthened and repaired by Mahmud Begada, as to make Ahmedabad one of the strongest cities in India.[2] In the seventeenth century the walls of Ahmedabad were noticed with wonder and praise by almost all European travellers.[3] During the disorders of the early part of the eighteenth century (1723-1750) the walls suffered, and in 1755 the rains were so heavy that in several places they fell down.[4] In the same year Momin Khán put them in repair. But after in 1780 they were, near the Khán Jahán gate, breached by the British, they would seem not to have been put to rights, and gradually became so

---

1 A common saying in Ahmedabad makes this out to have been the mosque of the Dáudi or Shia Bohorás. Another building of some interest, to the north-east of the railway station outside the Kálupur gate, is the tomb of Khán Jahán. This, the last of the Ráos of Sorath, defeated by Mahmud Begada in 1470 or 1472, became a devout Muslim and a follower of Hazrat Sháh A'lam. Bird's Mirát-i-Ahmadi, 209; Rás Mála, 274.

2 Ferishta (Briggs, IV. 70) states that in 1486 Mahmud Begada caused the city to be surrounded by a wall and bastions marking the time by the date-line 'Whoever is within is safe.' This gives 892 H. or 1486 A.D. But, as in the Mirát-i-Ahmadi, it is expressly noticed that Sultán Ahmad built both the Bhadar or citadel and the city walls, Mahmud Begada can only have repaired them. Major Watson.

3 Finch (1611) says the city had a good share of strength in castle gates and strong walls (Harris, I. 89); Whittington (1613) mentions its strong wall (Kerr, IX. 127); Terry (1618) its many fair gates girt with a high and thick brick wall (Voyage, 179); Mandelslo (1638) its beautiful walls with twelve gates, many high towers and a ditch twenty-five yards broad but dry and ruined in places (Voyages, 77); Thevenot (1666) its walls of stone and brick strengthened by great round towers and kept in the most careful repair (Voyages, V. 23), and Ogilby (1680) its walls six miles round, forty feet high and fifteen thick (Atlas, V. 209.)

4 Watson's Gujarát History, 145.

Chapter XIV.
Places of Interest.
AHMEDABAD.
City Walls.

ruinous that carts and carriages could pass through, and the city was as unsafe as the suburbs, robberies and murders being common.[1] In the early years of British management (1818-1825) complaints of the bad state of the walls were constant. In 1825 the Collector wrote; 'the city is on all sides open to thieves and robbers,'[2] and in 1828 the circuit Judge drew attention to the state of the walls urging that some of the city revenues should be set apart for their repair, but fearing that it was too late to hope for any sufficient remedy.[3] Shortly after this, chiefly by the exertions of Mr. H. Borradaile the Collector, much public interest was taken in the restoration of the walls; a tax on clarified butter was levied and in 1832 at a cost of £25,000 (Rs. 2,50,000) they were thoroughly repaired.[4] In 1847 Mr. Briggs described the walls as five miles six furlongs and twenty-eight poles round, averaging fifteen feet in height and from four to five feet thick, with large bastions at every fifty paces. The wall was then, and has since been kept in good repair.[5]

Except some parts on the river side which are faced with stone, the whole city wall is of brick. In the walls are eighteen gates, fifteen large and three small. Of the fifteen, one is closed, and two are new. These gates are, beginning from the north-west corner, three in the north-wall, the Sháháp̄ur in the north-west, the Delhi in the north, and the Daryápur in the north-east; four in the east wall, the Premábhái, a new gate, in the north-east, the Kálupur in the east, the Panchkuvá, a new gate, in the east, and the Sárangpur in the south-east; four in the south wall, the Ráypur and A'stodiya in the south-east, and the Mahudha, the closed gate, and the Jamálpur in the south; seven in the west wall, the Khán Jahán, Ráykhad and Mánek in the south-west; the three citadel gates, Ganesh, Rám, and Bárádari in the centre; and the Khánpur gate in the north-west.[6]

---

1 Briggs' Cities of Gujaráshtra, 209. Forbes (1781) describes the wall as 5¾ miles round with irregular towers every fifty yards, twelve chief gates and several sally ports Or. Mem. III. 117. Of the walls, in 1750, the author of the Mirát-i-Ahmadi gives these details; there were twelve gates, beginning from the north, Sháháp̄ur, Idarya or Delhi, Daryápur, Kálupur, Sárangpur, Ráypur, A'stodiya, Jamálpur, Khán Jahán, Ráykhad, and Khánpur. He does not mention the Mahudha or closed, *Band*, gate and gives a Dhedriah gate (not identified). The walls, he adds, had 139 bastions or towers, 9 corners or faces, and 6763 battlements. They were about three miles round and enclosed a space 3125 cubits long and 2500 cubits broad. Their average height was ten to twelve feet. Major Watson's Translation, Feb. 4, 1879.

2 Bom. Gov. Rev. Rec. 117 of 1825, 44.

3 Circuit Judge's Report, April 20, 1828.

4 Ahmedabad Architecture, 58.

5 Briggs' Cities of Gujaráshtra, 209. Breaches made by the 1875 flood were repaired.

6 The details are: the Sháháp̄ur gate, the doors of iron-plated timber, the gateway of three stone arches twenty feet high and fifteen broad with a roofed platform 32×18. The Delhi gate, the doors of iron-plated timber, the gateway of three stone arches fifteen feet broad and twenty-two high with a roofed platform 32×20 pierced for one gun. In 1878, on either side of the main gateway, two openings, each 8 feet wide and 16 high were added for foot passengers at a cost of £489 (Rs. 4890). The Daryápur gate, the doors of iron-plated timber, the gateway of three stone arches the largest twenty-two feet high with a roofed platform 30×11. The Premábhái gate, Saracenic in style, 16 feet broad and as many high, was built in 1864 at a cost of £914 (Rs. 9140). The Kálupur gate, the doors of iron-plated timber, the gateway of three stone arches twenty-seven feet high with a roofed platform 32×18, and pierced for two guns. The Panchkuva, five well, or Nava, new gate was at a cost of £1145 (Rs. 11,450), built in 1871 for easy access to the railway station. It consists of

Chapter XIV.
Places of Interest.

AHMEDABAD.
South Division.

From the railway station passing through the Kálupur, Panchkuva, or Sárangpur gate, and taking one of the main roads west to the citadel, in the left or south division of the city are, in the south-east corner, two mosques, the Queen's mosque in Sárangpur and the mosque of Muhammad Ghaus. Though the date of the Queen's mosque is uncertain, its close likeness to the Achut Bibi's mosque (p. 284) fixes it at about 1510, late in Mahmud Begada's (1459-1511) reign. This is one of the buildings in which the flat Hindu and the arched Musalmán styles are most happily combined. It has lost one of its minarets.

Queen's Mosque in Sárangpur.

About 300 yards south of the Queen's mosque is the mosque of Shaikh Muhammad Ghaus Gwáliori. This, built in 1562, has little in it of the special Ahmedabad style. Clumsy, though not wanting in grandeur, it looks a bad copy of the Jaunpur mosques (1397-1478). Very much like the larger mosques of upper India it is worthy of study, especially for the skill shown in arching off the square corners so as to receive the round domes.

Muhammad Ghaus' Mosque.

About 800 yards south-west, not far from the A'stodiya gate, are two mosques, Ráni Asni's, better known as Ráni Sipri's,[1] and Dastur Khán's. Asni's mosque, 'the gem of Ahmedabad, and of its class one of the most exquisite buildings in the world,' was finished in 1514 by Ráni Asni the widow of Sultán Mahmud Begada. It is small in size, fifty-five feet by twenty and has two fifty-feet high

Ráni Sipri or Asni's Mosque.

---

three gateways of pointed arches, the central one 18 feet wide and 28½ high; and each side gateway 7 feet wide and 19 high. The Sárangpur gáte, doors of iron-plated timber, a gateway of three stone arches twenty-six feet high and fifteen broad and a roofed platform 33×16, pierced for three guns. The Ráypur gate, doors of iron-plated timber, a gateway of three stone arches twenty-six feet high and nineteen broad and a roofed platform 32×20, pierced for three guns. The A'stodiya gate, doors of iron-plated timber, the gateway of three stone arches seventeen feet broad and twenty-five high with a platform 28×27, pierced for three guns. The Mahudha gate with a roofed platform 30×21 and twenty feet high. This gateway was ill-omened and was built up and never used. It is spoken of as the Shut, *Band*, gate, and is probably the Dhodiah gate mentioned in the Mirát-i-Ahmadi. The Jamálpur gate, a gateway of three stone arches twenty-two feet broad and twenty-seven high and a roofed platform 32×27, pierced for one gun. The Khán Jahán gate with an arched gateway, iron plated doors and an open platform 26×20 and twenty-two feet high. It was near this gate that in 1780 the British breached the wall and took the city by assault. Shot marks may still be seen on the walls of a mosque near. (Briggs' Cities of Gujaráshtra, 211). The Ráykhad gate 2050 feet north of the Khán Jahán gate, has three stone arches and an iron-plated door. North of Ráykhad and about 158 feet south-east of Ganesh is the Mánek gate which is small in size and has stone steps. Under the head 'Bhadar' some account is given of the Bhadar gates. The Khánpur gate, the doors of iron-plated timber, the gateway of three stone arches twenty-four feet high by seventeen broad with a roofed platform 31×20.

[1] This mosque was till lately called the Ráni Sipri's mosque, and was supposed to have been built in 1432 by the wife of one of Sultán Ahmad's sons. But it has these words in Arabic: "God who is blessed and high has said; 'Of a truth mosques belong to God, then call ye on no one else with him'; and the Prophet has said; 'He who builds a mosque for God Almighty, will have a castle built for him by God in Paradise.' This mosque was built during the reign of the great king, whose helper is the All-merciful, Shams-ud-dunya wad-din Abun-násir Muzaffar Sháh, son of Mahmud Sháh, son of Muhammad Sháh, son of Ahmad Sháh, son of Muhammad Sháh, son of Muzaffar Sháh the King. May God make his kingdom last! The builder of this mosque is the mother of Abu Bakar Khán, son of Mahmud Sháh Sultán, who is called Ráni Asni. During the months of the fourth solar year of the present reign in 920 (A.D. 1514)." Arch. Surv. Rep. 1874-75, 7.

Chapter XIV.
Places of Interest.
AHMEDABAD.

minarets. Hindu in style with only one arch in a side door, and with purely ornamental minarets, this building has the double charm of simple and uniform design, and of graceful and fitting detail. Though very beautiful the tomb in front is not equal in design to the mosque. The upper story is too tall for the basement and its unpierced stone has a heavy look. The parapet round the tomb is a rich specimen of Hindu work.

A'sa Bhil's Mound.

About 100 yards north-west of Ráni Asni's mosque is the site of the fort of the Bhil chief who, in early times, gave his name to the town of Asával. On this mound one of Sultán Ahmad's (1414) first mosques is said to have been built. In 1824 the mosque was mostly in ruins.[1]

Dastur Khán's Mosque.

About 100 yards west of A'sa Bhil's mound is Dastur Khán's mosque, built probably in 1486 by one of Mahmud Begada's (1459-1511) ministers. Its chief interest is the open cut-stone screen that shuts in the cloister round the court-yard.[2]

Haibat Khán's Mosque.

About 900 yards south-west of Dastur Khán's mosque, in the extreme south near the Jamálpur gate, is Haibat Khán's mosque, built by Haibat Khán, one of Ahmad's nobles, according to the common story on the site of a Hindu temple. Though of little beauty, this mosque is interesting as one of the earliest attempts to combine Muhammadan and Hindu elements. The front wall is plain, pierced by three small pointed arches; the minarets small and without ornament, rise like chimneys from the roof; and, with a dwarfed and unlighted clerestory, the centre is barely raised above the side domes. Inside, in the centre, is a Hindu dome of great beauty, and pillars taken from different temples with every variety of rich ornament. Except for the form of its dome, the outer porch would be as well suited to the entrance of a Hindu temple as of a Musalmán mosque.

Christian Grave-yard.

About 500 yards west of Haibat Khán's mosque, outside the city close under the Khán Jahán gate, where in 1780 the walls were breached and the city taken by the English,[3] is the Protestant grave-yard once a Musalmán burying ground. A number of the tombs are of marble. The only one of any age was raised, in 1780, by General Goddard, to Captain Thomas Gough of the Bengal army, one

---

1 City Survey Records, 1824.

2 A stone in this mosque has these words in Arabic: "God who is blessed and great has said; 'Of a truth mosques belong to God; worship no one with him'; and the Prophet, God's blessing on him, has said; 'He who builds a mosque for God will have a house like it built by God for him in Paradise.' The edifice of this Jáma mosque was built during the reign of the King of Kings, Násir-ud-dunya wad-din Abul Fath Mahmud Sháh, son of Muhammad Sháh, son of Ahmad Sháh, son of Muhammad Sháh, son of Muzaffar Sháh the King, by the slave who hopes to gain the mercy of God, the Málik Malik Ghani Khása-zád who has received from his august majesty and the high shelter (of the people) the title of Dastur-ul-Mulk. May God keep him in his high place that he may gain the mercy of God, and meet with his great reward. This was on 10th Shábán of the year 8, (probably 892, that is 1486)." Arch. Surv. Rep. 1874-75, 6, 7. This mosque is said to have been built from a sum collected from an almond, *badám*, worth a little above one-fiftieth part of an anna, taken daily from each of the labourers employed in repairing the city walls. City Survey, 1824.

3 Shot marks may be seen on the gateway.

of the volunteers for the 'forlorn hope.'[1] A stone-throw to the south is the Roman Catholic grave-yard, a small strip of ground with no rich tombs.

Passing back, on the main road near the centre of the city, are the Jáma mosque, Sultán Ahmad's tomb, and the tombs of Sultán Ahmad's Wives.

Jáma Mosque.

The Jáma Masjid, or Public Mosque, finished in 1424 (4th January) by Sultán Ahmad I.,[2] about sixth in age of the Ahmedabad Musalmán remains, is the largest and grandest mosque in the city and one of the most remarkable buildings of its class in India. On the south side of the main street, a little east of the Three Gateways, once the centre of a great square, the mosque enclosure, 382 feet long by 238 wide, has gradually been shut in by houses built against its outer walls. Through the small porch in the centre of the north wall is a large paved courtyard, surrounded on the north, east, and south by cloisters with a light-domed roof supported by stone-pillars, the walls inscribed with sentences from the Kurán. In the south wall, opposite the north entrance, is another gate, ornamented by a covered stone porch, probably of later date than the mosque, so purely Hindu, that but for the arches at its base, it might be taken for an unmoved temple. In a pond in the centre of the courtyard worshippers bathe, and then pass west, where the mosque fills the whole breadth of the western wall. From the courtyard the mosque seems a row of five domes, the centre dome highest, with lower-domed aisles, and in the same line beyond and lower than the aisles, domed wings. The wings are open in front, and the centre and aisles are entered by open archways. The central arch is on either side adorned by the base of a highly ornamented tower, all that is left of the once famous shaking minarets.[3] The mosque is a simple rectangular hall 210 feet long by ninety-five broad. Its floor is of coarse white marble with, under the central entrance-arch, a black marble slab, said to be the back of a figure of Párasnáth, the 23rd Jain saint. The

---

[1] Briggs' Cities of Gujaráshtra, 269. The inscription runs; 'Erected by order of General Goddard to the memory of Capt. Thomas Gough, who died of the wound he received in the assault of Ahmedabad on the 15th February 1780. Aged 35 years.' Capt Gough's is the only tomb of any historic interest. Mr Fernandez, May 1879.

[2] On a marble slab above the centre of the three prayer niches are these words in Arabic: "This high and far-stretching mosque was raised by the slave who trusts, comes again, and seeks the mercy of God, who is kind, who alone is to be worshipped, as the Kuran says, 'truly mosques belong to God, worship no one else with him,' by the slave who trusts the helping God, Násir-ud dunya wad-dín Abul Fath Ahmad Sháh, son of Muhammad Sháh, son of Muzaffar the King. The date of its building from the flight of the Prophet, God's blessing on him, is the first day of Safar, may the month end successfully and victoriously, in the year 827 (4th January 1424)." Arch. Survey Report, 1874-75, 5.

[3] In 1781 Mr Forbes saw and drew two lofty minarets, 'elegantly proportioned and richly decorated.' A circular flight of steps led to a gallery near the top of each. (Or. Mem III. 124,125). A little force at the arch of the upper gallery made both minarets shake, though the roof of the mosque remained unmoved. Grindlay, Scenery of Western India, 1826. The minarets were thrown down by the great 1819 (June 16th) earthquake. Both of them broke off at the sill of the window whence the call to prayers used to be chanted. Mr. Burgess' Notes (1870), 35.

Chapter XIV.
Places of Interest.
AHMEDABAD.

arrangement of pillars[1] is simple. Each of the five domes seen from outside, represents a row of three domes, adorned with the most delicate fretwork, and each supported by twelve pillars. On the west wall the prayer niches, *kiblás*, are inlaid with skilfully grouped coloured marbles. Compared with the earlier buildings, the Jáma mosque shows much skill in combining Hindu and Muhammadan elements. Except the clerestory pillars and perhaps the porch of the south gateway there are few fragments of Hindu buildings.

Sultán Ahmad's Tomb.

The door, in the east wall of the Jáma mosque enclosure, leads to the mausoleum of Sultán Ahmad I., a massive domed building lighted at intervals by windows of pierced stone-work and enclosing several white marble tombs. Besides Sultán Ahmad's tomb, the building contains the tomb of his son Sultán Muhammad, and his grandsons Jalál Khán, Sultán Kutb-ud-din, and Sultán Ahmad II.[2] On Sultán Ahmad's tomb, Musalmáns and Hindus still lay flowers and other offerings.

Wives' Tombs.

East of this mausoleum, in an enclosure ten feet above the ground, entered by a lofty gateway and surrounded by a trellised cloister, are the tombs of some of Sultán Ahmad I.'s queens. The principal tomb, richly carved in white marble, and girt with a Persian inscription in minute relief, is that of Moghalái Bibi. Near it, of black marble, inlaid with mother-of-pearl is the tomb of Murki Bibi, an especial favourite, and other tombs are grouped around. They are beautiful works of art, fitted to their object, and graceful in form and detail.

Dutch Factory.

Across the main road from these tombs is a large heavy upper-roomed building. This, now used as the Bombay Bank, was once the Dutch factory. The Dutch came to Ahmedabad in 1618, bringing rich presents and, in spite of Sir Thomas Roe's attempts[3] to discredit them, were well received, and allowed to establish two factories, one in the city and one at Sarkhej. The Sarkhej factory was closed before 1670.[4] The city factory was kept on till 1744 when all the European servants and the Company's effects were removed and only three or four natives left to keep the lodge.[5]

---

1 The number of pillars is given by Mr. Burgess at 260, by Mr. Fergusson at 300, and by Mr. Hope at 330. Mr. W. E. Waite of the City Survey Office has kindly supplied these details: There are in all 736 pillars. Of these 238 are in the cloisters and porches and 498 in the mosque. Of the mosque pillars, 356 are on the ground-floor; 42 in the women's cloister; 70 in the balcony on the first floor, and 30 in the balcony on the second floor.

2 On a slab in the tomb are these words: "The lofty tomb of Ahmad Sháh, the King, whose dome for height rivals the vault of heaven, though it had many servants and though they always strove to keep it in order, no one has yet repaired it in so splendid a manner as the perfect mind of that respected and exalted man, the benefactor of the present generation, Farhat-ul-Mulk, who is pious, God-fearing, liberal and faithful. The date-line of his office tenure has, with God's help, been shewn by the poet Yahya, in the words 'Farhat-i-Mulk;' these letters give the year A.H. 944 (A.D. 1537-38). This writing is the work of Ahmad Chhajju." Arch. Survey Report, 1874-75, 8.

3 Kerr, IX. 364.

4 Stavorinus, III. 110.

5 Stavorinus, III. 107-111.

The chief Dutch trade was in indigo and calico-prints, the latter much coarser than those of Masulipatam.[1] Not far from this stood the English factory. As neither the building nor its sight has been identified, details regarding it are given in a foot-note.[2]

The Three Gateway

About 260 yards north-west of the Jáma mosque, the Tin Darváza or Three Gateways, built by Sultán Ahmad I., a magnificent stone structure with some rich carving, crosses the main street. The roadway of the centre gate is twenty feet wide, and that of each side gate seventeen. The height of the arches is twenty-five feet. The terrace on the top of the gateway was formerly roofed over. But in 1877 the gateway was repaired, and the terrace thrown open. This gateway led into the large enclosure that formed the outer court of the Bhadar, known as the royal square, *Maidán Sháh*, 1600 feet long and 800 broad, which in 1638 was surrounded by two rows of palmtrees and tamarinds mixed with citrons and oranges.[3] Though modern buildings have greatly encroached on the space, its original form may still be traced.

Káranj.

Opposite the middle of the Three Gateways and in the centre of the open space is a building known as the Káranj or fountain, near which, as has been the custom since, in the fifteenth century the Sultán used to attend it in state, the Friday market is held. The building was till lately a quadrangle, enclosing a ruined pond and fountain, formerly, it is said, fed from a well in the Bhadar.[4] It is now in the hands of a dealer in European goods, who by additions has made it one of the chief buildings in the city. In front of this house, and facing the Bhadar gate, is a municipal garden, laid out with much taste in 1876-77 at a cost of about £1000 (Rs. 10,000).

---

[1] Thevenot, V. 35.

[2] In April 1614, Aldworth hired a house, and left brokers and servants to provide goods (Orme's Hist. Frag. 334-336). In August 1615, Aldworth died, and Kerridge, who succeeded him was, apparently without cause, imprisoned and fined by the Viceroy. (Briggs' Cities of Gujaráshtra, 287. Anderson's Western India, 19). But in 1617 when Roe was in Ahmedabad, the English would seem to have been a large party and well treated (Kerr, IX. 354). In 1623 the Italian traveller Della Valle stayed at the English factory (Letters, III. 91). In 1638 Mandelslo found the factor, Mr. Roberts, living in great style, with a handsome Persian horse with silver trappings, and an Indian carriage, gilt and covered with Persian carpets, drawn by two bullocks as strong and full of spirit as European horses. The factory was very well built with many handsome rooms and courtyards for storing goods. The president's room, looking out on a fountain, was carpeted and the pillars swathed in silk. There was also a great supper-hall (Voyages, 75, 76). In 1666 they were well lodged, doing a great trade in Delhi and Lahore cloth (Thevenot, V. 26). Soon after this, the factory was closed (Anderson, 75). But it was again opened and is mentioned in 1702, at the time of the union of the rival Companies (Anderson, 115). After the union it was continued for many years. In the 1755 disturbances when Momin Khán took Ahmedabad from the Maráthás, the Kolis pillaging the town, attacked the English factory but met with so spirited a resistance that they retired. (Watson's Gujarát Hist. 145). The factory seems to have been closed before 1780, when the city was captured by General Goddard. At that time the building would seem to have been removed; but the spot was still well known. (Forbes' Or. Mem. III. 131).

[3] Mandelslo's Voyages, 76. Thevenot gives 2100 feet long and 1200 broad. When he saw it (1666) there were many small square buildings, about nine feet high, the police magistrate's, *kotvál's*, tribunals. In the centre of the square was a very high tree with a target at the top for archery practice.

[4] When (1623) Della Valle visited Ahmedabad, the water of the well was good for the whole city and great crowds of people went to fetch it. Letters, III. 93. The ground near the Káranj has lately been raised four feet. During the great 1875 flood the water stood from 9 to 11½ feet deep.

Chapter XIV.
Places of Interest.

AHMEDABAD.

North of the garden are the Ahmedabad High School buildings, and to their west the Hemábhái Institute, with a good library, and a fair store of English and vernacular newspapers and periodicals.

Malik Shábán's Mosque.

Near it is Malik Shábán's, or Huzur-i-Sháh's, mosque, a small building with every trace of having once been the porch of a Hindu temple. It was built in 1452 (21st May) during the reign of Sultán Kutb-ud-din.[1]

A'zam Khán's Palace.

About 400 yards south-west of the Three Gateways is A'zam Khán's palace,[2] one of the latest Musalmán remains, built in 1636 by A'zam Khán, the 23rd Viceroy (1635-1642), whose love of building gained him the nickname of the white ant, *udai*. First used as a travellers' rest-house, or caravanserai, it afterwards was made a college; under the Maráthás it became the residence of one of their military leaders; and under the British (1820) it was changed into a jail. Over the entrance a Persian date-line, 'Echo was asked to give a date: a voice was heard saying the house of goodness and favour,' conceals the year 1046 H., that is, 1636 A.D. The jail, connected on both sides with the Bhadar walls, has a very handsome entrance. The gate, about eighteen feet high, passing under an archway, opens into a regular octagonal hall of great elegance, 37½ feet in diameter, each side containing on the upper story an arched gallery inclosed in front by a low wall of open cut stone. Each gallery is surmounted by a cupola with a slightly flattened ceiling whose marble chequering is hid by a coating of whitewash. The walls are embellished with designs cut into the plaster. Beyond the hall is a very large square surrounded by storied blocks of buildings used as cells for prisoners, and beyond this square lie the manufactories enclosed by a high wall. To the left, on entering the square, are the hospital and female wards. Underneath the

---

[1] On a slab in this mosque are these words in Arabic; "God Almighty says 'Of a truth mosques belong to God, worship no one else with him.' And the Prophet, God's blessing on him, says: 'He who builds a mosque for God will have a house built for him by God in Paradise.' This mosque was built during the reign of the King of Kings Kutb-ud-dunya wad-din Abul Muzaffar Ahmad Sháh, son of Muhammad Sháh, son of Ahmad Sháh, son of Muhammad Sháh, son of Muzaffar Sháh the king, by the slave who has need of God the Helper, I mean Shábán, son of Tuhfa Sultáni who has the title of Lord Chamberlain, *Imád-ul-Mulk*, from a desire to gain the favour of God and win his great reward. This took place on the 2nd Jamád I. 856 (21st May 1452)." Arch. Surv. Rep. 1874-75, 6.

[2] Mandelslo (1638) does not mention it. But Thevenot (1666) calls it a caravanserai, a great ornament to the square. The front rich with many balconies of stone trellis work, the entrance a great octagonal dome with gates opening into the chief building, square, two-storied, built of cut stone, polished like marble, with rooms all round for strangers. (Voyages, V. 25). The full writing over the entrance gate is: (1) The protector of the people of the universe under the shadow of the Almighty. (2) The Shahái Sáhib Kirán Timur the second, Sháhábud-din Muhammad, king of kings. (3) The king of kings of the world, the great Akbar Humáyun-like, a Sultán and son of a Sultán. (4) From amongst his servants, one who in soul and heart obeys his orders. (5) The glory of justice, A'zam Khán the brave whose sword is the life of the country. (6) He built in Gujarát a mansion, like which none in the world was made. (7) Wonderful edifice, its height is such as to tower to and above *Kiwán* in the firmament. (8) It is in beauty and taste like unto Paradise and it is meet that the gatekeeper of Paradise should be stationed here. (9) This Sarái and Palace is now completed by order of the Lord of Justice, the most openhanded of men. (10) Echo was asked to give its date. A voice answered 'The house of goodness and favour.' Briggs' Cities of Gujaráshtra, 299.

octagonal hall and of the same form, is a splendid vault, *tehkhána*, entered by a flight of steps at each side, with, in the middle, a reservoir and a fountain. Behind the jail and inside the Bhadar wall is a small garden worked by the convicts.[1]

The Bhadar or Citadel.

Close to A'zam Khán's palace a gateway,[2] with a police guard-room on either side, a balcony above, and a modern Hindu temple to Bhadra Káli Máta close by, forms the entrance to the Bhadar or citadel. This, called Bhadar after the citadel of Pátan or Anhilváda, which was originally dedicated to the goddess Bhadra or the propitious Káli, was built by Sultán Ahmad at the time of founding the city (1411).[3] Square in form, enclosing an area of about forty-three acres, and containing 162 houses, the Bhadar has eight gates, three large, two in the east and one in the south-west corner; three middle-sized, two in the north and one in the south; and two small, in the west.[4] To the west, along the river bank, the Bhadar rests on the outer city wall and in other parts is surrounded by a high brick wall kept in a state of good repair. Between the Bhadar gate and the jail is a celebrated temple dedicated to Kálka Máta, the special goddess of Pávágad near the old city of Chámpáner. It is held in great veneration by Hindus,

---

1 Mr. J. F. Fernandez, Huzur Deputy Collector.

2 This gateway is of historic interest. Through it, in 1459, Mahmud Begada, king for only a few months, and not fifteen years old, quiver on back and bow in hand, with only 300 horsemen, marched to disperse his rebel nobles and their 30,000 followers. Leaving the palace, the young king ordered the roads leading to it to be held by elephants, and, with the royal music playing, marched slowly along the main street. His cool bravery gave some of his faithful nobles time to join, and forming a considerable force, though small compared with the insurgents, attacked them, put them to flight, and destroyed their leaders. Briggs' Ferishta, IV. 48, 49, and Bird's Mirát-i-Ahmadi, 204.

3 According to Ogilby (1680) the Bhadar was, except Kábul and Kandahár, considered the strongest Moghal fortress in India. It was commonly fortified by eighteen large and many small guns (Atlas, V. 209). In 1875 among some foundations dug up inside of the Bhadar were several large stone blocks with Hindu carving. One of them had a short inscription dated 1303 (1359 S.). These have been (Arch. Survey Report, 1874-75, p. 3,) supposed to be foundations of Sultan Ahmad's citadel. But it seems more likely that they belonged to a palace, or some other of the citadel buildings, as the author of the Mirát-i-Ahmadi expressly states that the walls of the present citadel were built by Sultán Ahmad I. (Major Watson). Della Valle (1623) describes the palace as having a courtyard with white polished walls, and in the middle a high tower for archers. To the left were the Viceroy's rooms, and other rooms for the commanders of 1000 horse. In one of the balconies, Sháh Selim was said to have put an image of the Virgin Mary. But Della Valle did not see it (Letters, III. 94). Mandelslo (1638) describes the citadel as very large and well made of cut stones, one of the best in the empire (Voyages, 76). Thevenot adds 'as big as a small town' (Voyages, V. 25). Both of these travellers mention a brick palace close to the square, belonging to the King with, on the gate, a great musicians' balcony. Inside were rooms handsomely gilt and painted but wanting in proportion and design. (Voyages, V. 25).

4 The details are: on the north face two middle-sized gates, one leading to the Khánpur, and the other to the Mirzápur ward; the former was originally a small opening lately, at a cost of £11 (Rs. 110), turned into a gateway, 13 feet wide and 15½ high, with neither doors nor arches; on the east two, both large, the Lál in the north-east and the main gate described in the text; on the south two, one a new (1874) middle-sized gate without doors, in the centre near the jail garden, and the other the large Ganesh gate in the south-west corner; the former, an arched gateway, 18 feet wide and 17½ high, cost £92 (Rs. 920); the Ganesh gate was in 1779 opened by A'páji Ganesh, it is said, in one day; on the west two, both small, the Rám, with stone steps in the south-west, and the Bárádari in the north-west.

Chapter XIV.
Places of Interest.
AHMEDABAD.

and is open for worship throughout the day. The Máta is a special favourite with lately sentenced prisoners, who, with all sorts of promises, call on her to help their appeals. Over the Bhadar gate on a high wall, between the two towers, on one of which in former times floated the British flag, stands the town clock with two dial plates, one facing the Káranj, the other facing the west. It was put up in 1849 at a cost of £800 (Rs. 8000).

Within the Bhadar.
Sultán Ahmad I.'s Mosque.

Within the Bhadar, the chief remains are Sultán Ahmad's mosque on the south; the Mánek Buraj, or ruby bastion, at the south-west corner, and the Sidi Syed mosque in the north-east. Of these Sultán Ahmad's mosque in the south, built in 1414,[1] one of the earliest of Ahmedabad Musalmán remains, is said to have been used as the royal household's private chapel. The outer wall, almost bare of ornament, with ill designed pointed arches and squat minarets, mark the Hindu's first attempts to build in Musalmán style. Inside, five large and several smaller domes formed of converging stones and richly carved, are supported by rows of pillars, some of them still bearing Hindu figures and emblems. The north porch leading into the latticed "Princesses' Gallery" is Hindu throughout and may be part of some temple on whose site the mosque was raised. The pavement is of white marble, the canopy-covered pulpit has a yellow marble balustrade carved in a leafy pattern, and white marble steps. In the courtyard is a mound called *Ganj Sháhid* or the martyrs' mound, the tomb of warriors who perished in Sultán Ahmad's early fights.[2]

Mánek Tower.

West of Ahmad Sháh's mosque is the Mánek Buraj, or ruby bastion, built, it is said, round the foundation-stone of the city. This tower, on the outside fifty-three feet high, used to contain a large roofed well known as the *Mánek kuva*, or ruby well, seventy-seven feet round. By a change in the course of the river the well became dry and in 1866 was filled up.[3]

Sidi Syed's Mosque.

Outside of the Lál gate, built into the north-east corner of the Bhadar, is Sidi Syed's mosque, the work of one of Sultán Ahmad's slaves. Desecrated by the Maráthás, the mosque is now used as

---

[1] On a large marble slab over the prayer niche, *mehrdb*, are these words: "This large and far-stretching mosque was raised by the slave who calls, comes again, and seeks the mercy of God who is worshipped in mosques with bows and prostrations, who alone is worshipped according to the verse, 'truly mosques belong to God, worship no one else with him,' by the slave who trusts the helping God, king Ahmad Sháh, son of Muhammad Sháh, son of Muzaffar. The date of its building is 4th Shawwál 817 A.H. (17th December 1414)." Arch. Surv. Rep. 1874-75, 4, 5.

[2] The records of the 1824 survey add; 'the Peshwa made use of the mosque as a storehouse for wood and grass. It was much shaken by the 1819 earthquake but was still (1824) in good order.'

[3] The Hindus say that the Mánek Buraj is not the ruby tower but Mánek's tower, called after a Hindu monk, *báva*, who had to be conciliated before the walls were built. Every day he made a cushion and every night he picked it to pieces, and as he picked, the day's work at the walls fell down. The Sultán found who was troubling him, and asking him to give another proof of his power, got the magician into a small jar and kept him there till he promised to let the wall-building go on in peace. After this magician, besides the tower, the great market Mánekchok is said to have been called, and the tomb and shrine of Máneknáth Godadia, who is said to have been buried alive, may still be seen.

a public office. Two of its windows, filled with a white marble tracery of tree stems and branches, are for fineness, size, and balance unrivalled in India, and for naturalness of design are 'probably unequalled by any detail in Greek or Gothic architecture.'

Besides these Musalmán remains are some modern Hindu temples to Rám, Hanumán, Shiv, Krishna, and Vithoba. The court house, *adálat*, razed to the ground in 1874, was formerly the palace of Sh[illegible]ukar (1798-1800) the Peshwa's governor of Ahmedabad.[1] The site of the Collector's house and office was once occupied by a palace whose ruins were cleared away when the office was built.[2] In 1874, to the original building, a registration office and a police inspector's office were added, and the lock-up was enlarged. The small round tomb in the yard near the Collector's office, is said to contain the head of Ibráhim Kuli Khán, a Persian warrior, who died a martyr to the faith and had his body taken to Bagdad. Ibráhim is the saint to whom all people, confined in the magisterial lock-up, pray for an acquittal. Probably from the resemblance in the sound of his name to the phrase '*Abhrám kul na dává*' used in releases and sale-deeds, Ibráhim is believed to have been a specially just man who was always appealed to as an arbitrator.[3] To the north of the Collector's office is an old bath, *hamám*, used as the Huzur Deputy Collector's office, and to the east is a mausoleum used as the office of the Exceutive Engineer.

Gáikwár's Palace or Haveli.

Before beginning the buildings in the north of the city, some account should be given of the Arsenal, formerly known as the Gáikwár's palace, *haveli*, the second citadel in Ahmedabad. Lying in the south-west corner, between the Ráykhad and Khán Jahán gates, this citadel is supposed to have been built in 1738, when the government of the city was divided between Momin Khán and the Maráthás.[4] Afterwards (1757) when, in the division of the city between the Peshwa and Gáikwár, the *haveli* fell to Dámáji, he probably improved and strengthened it.[5] An irregularly built wall with heavy gates, encloses a large area divided into three parts, that to the north was originally a garden watered by a Persian wheel; the centre and inner part, resting on the city [illegible] wall, was the [illegible] citadel; the south part was added, in 1814, by Kesoba Pandit. For some years after the cession (1817-1824) this building was used as barracks for the city garrison. In 1833 it was turned into an arsenal for the Northern Division of the Army. After the opening of the railway it was reduced to an ordnance depôt. In the north are quarters

---

[1] In 1817 the palace is said to have had one large hall, wanting nothing but a staircase to make it ready for a court-room. The rest of the building was divided into small rooms and passages, confined and dark with, it was said, 350 doors (p.308). Mr. Dunlop, 28th December 1817. Bom. Gov. Litho. Papers, 149, 125, 126.

[2] Survey Records, 1824. This palace was called the *Pádsháhi Diván khána* where (1817) the throne of cushions and pillows was still laid out and daily decorated with flowers, Mr. Dunlop, 28th December 1817. Bom. Gov. Litho. Papers, 149, 127.

[3] '*Abhrám kul na dáva*' is generally taken to be Ibráhim Kuli's claim. The phrase is Arabic from the words, *am* in general, *ibrái* release, *kul* all, and *na* or rather *lá*, *daáwa* without claims. Mr. Fazal Lutfullah.

[4] In 1740 Momin Khán had to pull down a tower he had built which commanded the Marátha deputy's residence at Jamálpur gate. Watson's Gujarát History, 124.

[5] The building is attributed to the brave Dámáji. Briggs' Cities of Gujaráshtra, 269.

Chapter XIV.
Places of Interest.

for the deputy commissary of ordnance; in the centre are the military stores; and in the south are lascars' lines.

AHMEDABAD.
North Division.
Shuját Khán's Mosque.

Outside of the Bhadar, about 400 yards north-east of the Lál gate, are the mosque, tomb, and college of Shuját Khán. This mosque, which is not shown in the map, has two slender minarets three bays apart, and a marble floor divided by piers into five bays. The pulpit steps are of yellow marble and over the prayer niche are written the creed and the date 1107 H. (A.D. 1695-96). The walls are lined with marble six feet high. On a small slab, let into the back wall, are carved the words '*Ya Fattáh*,' Oh Opener! The tomb is of brick, its marble floor much destroyed.[1] This, also called the marble and the ivory mosque, is described by Mr. Forbes[2] (1781), as being 'finely proportioned and proverbially beautiful among Ahmedabad Musalmáns, with a handsome tomb, and a once sumptuous ruined palace, or rather college, *madrasa*.' Mr. Briggs (1847) thought the minarets poor and the domes large and well proportioned. The floor was paved in compartments of different coloured marble.[3]

Sháh Wajih-ud-din's Tomb.

About 150 yards north of the Bhadar, and about 400 west of Shuját Khán's mosque, is Sháh Wajih-ud-din's tomb, built by Syed Murtaza Khán Bukhári, the eleventh (1606-1609) viceroy, at the beginning of the Emperor Jahángir's reign. Though the chief dome is too tall, and the long groin wants some central point, this is a very beautiful monument, the whole graceful and the windows of delicate tracery.[4]

Syed A'lam's Mosque.

About 160 yards further north, is Syed A'lam's mosque built about 1420 by Abu Bakar Husaini. This, though early, shows some considerable advance towards harmonizing the outer and inner architecture. At the same time the bases of its minarets are Hindu story is heaped on story with no apparent motive, and there are balconies without windows. The inner details are as rich as Hindu, art could make them.

Queen's Mosque in Mirzápur.

About 700 yards north-east of Syed A'lam's mosque, on the road to the Del[illegible] is the Queen's mosque in Mirzápur, built [illegible] in the [illegible]ani gate, [illegible]30-1440) of Sultan Ahmad [illegible] probably [illegible]atter years (14[illegible] [illegible]'s reign. This mo[illegible]sque, 105 feet long, forty-six broad, and thirty-two high, takes its name from two ladies, probably of Sultán Ahmad's household, whose tombs are close by. One of them, as her name Rupaváti shows, was by birth a Hindu. Though broken short in the 1819 earthquake, the bases of their minarets, from the fine tracery in their niches, are still the mosque's chief beauty. This is one of the

---

1 Arch. Surv. Report, 1874-75, 10.
2 Forbes' Or. Mem, III. 125, 126.
3 Briggs' Cities of Gujaráshtra, 223. According to Mr. Forbes this of Shuját Khán was called the ivory mosque from being curiously lined with ivory and inlaid with a profusion of gems to imitate natural flowers bordered by a silver foliage on mother-of-pearl like those at Batva. (Or. Mem. III. 126). Over the prayer niche is written in ornamental style the Muslim creed and date 1107 H. (A.D. 1695).
4 This Viceroy also founded a ward, *mahallah*, and called it Bhukhári. Sháh Wajih-ud-din died in 1580 (988 H.), Blochmann's Ain-i-Akbari, I. 415. There is an underground reservoir and a cistern said to have healing power and not to have been dry 'for 400 years.' Survey Records, 1824.

buildings where the attempt to combine the arched Musalmán and the flat Hindu styles, was hardly a success; the plainness of the central arch clashing with the extreme richness of the upper cornice and the side minarets. Close by the mosque is a monument, with a large central and two side domes, raised over the tombs of the two ladies who built the mosque. The inside of the dome is richly fretted. The design is like, but in Mr. Fergusson's opinion better than, that of the Ráni Asni tomb.

The Roman Catholic Chapel.

About 130 yards to the south-east of the Queen's mosque is the Roman Catholic Chapel, a small plain building. It was built in 1842, and enlarged in 1864; the cost, on both occasions, being met by subscriptions. It has two rooms attached at the northern angle of the eastern side for the use of the priest.

English Church.

About 350 yards north-east of the Queen's mosque in Mirzápur is the English church built in 1848 at a cost of about £1200 (Rs. 12,000). The style is Elizabethan with lancet windows, pointed tiled roof, and western belfry. The ground plan is in the form of a cross, seventy-one feet long and forty-two broad.[1] It is able to hold 120 persons.

Sháhápur Mosque.

Next, in the extreme north-west, is the Sháhápur mosque built, in 1565, by Shaikh Husain Muhammad Chishti, and, in the troubles of that time, never finished. Seventy feet long by thirty-eight broad, this, if finished, would have been one of the most beautiful of Ahmedabad mosques. The body, simple and graceful, arched in the under story, and except the central window flat in the upper, is a happy attempt to combine the pillared and arched styles. The minarets, perhaps in too great contrast to the plainness of the body of the building, are for richness of ornament and delicacy of tracery equal to any work in Ahmedabad.

Sultán Kutb-ud-din's Mosque.

About 900 yards south-east of the Sháhápur mosque are two other mosques, those of Kutub Sháh and Muháfiz Khán. Kutub Sháh's mosque, raised in 1446 by Sultán Kutb-ud-din during the reign of his father Sultán Muhammad II., is a large heavy building.[2]

Muháfiz Khán's Mosque.

Muháfiz Khán's mosque, built in 1465 by Jamál-ud-din Muháfiz Khán, for some time (1471) governor of Ahmedabad under Mahmud Begada, is small, fifty-one feet by thirty-six, with minarets fifty-five feet high. In the best repair of any of the Ahmedabad mosques the body is plain with three central arches. The detail is as elaborate and successful as in any of the Ahmedabad buildings. The base of its minarets, and their trellised niches and rich galleries, throw a charm over the whole. But, in Mr. Fergusson's opinion, the design is faulty and clumsy, inferior to the flat style adopted in the Sarkhej and Ráni Asni mosques.

Svámi Nárdyan Temple.

Muháfiz Khán's mosque completes the list of the chief old buildings of interest within the city walls. But about 500 yards to

---

1 Briggs' Cities of Gujaráshtra, 268.

2 Mr. Briggs complains of a want of taste and uniformity in the outside and of the clumsiness of the inner domes (Cities of Gujarashtra, 221, 223). The architecture, says Captain Lyon, 12, is Hindu in every respect.

Chapter XIV.
Places of Interest.

AHMEDABAD.

Svámi Náráyan Temple.

the south-east of Muháfiz Khán's mosque is an interesting modern Hindu building the Svámi Náráyan temple finished in 1850. Built by the successor of Sahajánand Svámi, whose eloquence and supposed power of working miracles helped him, in the early part of the present century, to spread a reformed Hindu religion over north Gujarát, this temple is in style almost the same as the old Gujarát Hindu buildings. Its principal feature is an octagonal dome, supported on twelve pillars in the usual Hindu form, except that the corners are filled in and that the porch is squarer. With this exception, which in Mr. Fergusson's opinion destroys the play of outline, the design of the whole is not unworthy of the great days of the earlier style. In connection with the temple is a large palace and monastery.[1]

Animal Home, or Pánjrápol.

Close to the Svámi Náráyan temple are two places of some interest. Of these one about 350 yards to the south-west is the Animal Home, *Pánjrápol.* This, a square enclosure of 12,538 square yards, surrounded by sheds, had in 1876 besides an insect-room, about 814 animals. The yearly expense, of about £1500 (Rs. 15,000), is met from the Mahájan funds, and the institution is managed by a committee of Hindus, chiefly of the Jain sect.[2] Further details have been given under 'Trade Guilds' in Chapter VI.

Nav Gaz Pirs.

A short distance south of the Svámi Náráyan temple is a group of nine tombs, each eighteen feet three inches long, known as the *Nav Gaz Pirs,* the nine yard saints. These tombs are worshipped, and a yearly fair is held in their honour.[3]

Old or Jahángir's Mint.

About 300 yards south of the Svámi Náráyan temple are the remains of Jahángir's mint,[4] a quadrangular yard with a large dwelling house at the entrance and inside a caste lodge and a girls' school.

This completes the chief objects of interest within the city walls.

Outside of the Walls.

Hatising's Temple.

Of the objects of interest outside of the city walls, beginning with the north, just beyond the Delhi gate on the right of the camp road, is Hatising's temple. This, together with a rest-house and a mansion close by, was finished in 1848 at a cost of about £100,000 (Rs. 10,00,000). The three buildings occupy a large rectangular enclosure. Close to the road is the dwelling, with a Greek portico and some handsome well shaped rooms. Its entrances, lobbies, staircases, halls, and drawing rooms, have all the finish and correctness of an European mansion. The temple designed

---

1 Sahajánand Svámi, born near Lucknow in 1780, at an early age set himself apart to reform the Hindu faith counselling, as opposed to the modern form of Vaishnavism, a moral and even an ascetic life. The Svámi's form of faith made and still makes many converts in Gujarát. Details of this sect are given under the head 'Vadtál' in the Kaira Statistical Account. (Bom. Gaz. III. 178, 179).

2 In 1666 Thevenot saw a bird and quadruped hospital with wounded cattle, camels, horses, and other animals, well fed, bought from Christians and Musalmans. If incurable they were kept there and if they got better they were sold. Voyages, V. 33. The home was in existence in 1781. Forbes' Or. Mem. III. 129.

3 Briggs' Cities of Gujaráshtra, 225. According to the 1824 Survey Records these tombs are believed to be twice as old as the city.

4 Briggs' Cities of Gujaráshtra, 224.

Chapter XIV.
Places of Interest.
AHMEDABAD.

by Premchand Salát is finished with the greatest wealth of ornament. The sculpture is inferior, and the style has lost in purity. But the work is as rich as in the best days of Jain architecture, and shows that their skill has in no way left the Gujarát builders and stone cutters. Entering by a rather poor Doric gateway, in a paved courtyard, surrounded by an imposing row of cloisters, containing fifty-two cells, each cell with a marble image of one of the *Tirthankars* or Jain saints and a roof rising in a richly-cut rounded spire, is the temple sacred to Dharmanáth one of the twenty-four Jain saints. It is two-storied with elaborate porches on three sides, the front porch crowned by a large Musalmán-like dome. The other two porches and the principal hall have the ordinary peaked roof covered with a crowd of small cupolas. Behind the roof of the hall, rise the three spires of the shrine, rounded and richly cut like the cloister spires. Inside, the chief feature of the temple is the *vimán*, or shrine, where are three cells each with an image of the saint.[1]

Hatising's Temple.

About a quarter of a mile beyond Hatising's temple, on the right of the cantonment road, is Hazrat Musa Suhág's mosque. It is said to have been built by Musa himself about 400 years ago. He was a *fakir*, generally known as Auliya, or the saint, Musa Suhág. The story is, that once, in answer to his prayers, rain was sent and a famine stayed. Then the people pressed after him so much that, to escape their notice, he dressed like a woman. At his mosque there are five tombs, four of them inside and one outside of the mosque enclosure. The story of these tombs is, that once the rains were too heavy and the king went to the holy man to ask him to pray to have the rain stopped. But he, fearing a fresh attack of popularity, prayed that the ground might cover him. His prayer was granted, and when the king tried to dig him out, his head rose in another place, and again disappeared. Digging at this place the head appeared in a new spot. And so it happened four times. Then the king said; 'let us offer flowers at his tomb.' But the saint again appeared, this time outside of the mosque enclosure, and said he wanted no offerings. The five tombs mark the five places thus consecrated. In the mosque enclosure is a very old and large *champa* tree with many of its twigs and branches hung with glass bracelets. Those anxious to have children come and offer the saint bangles, 7, 11, 13, 21, 29 or 126, according to their means and importunity. If the saint favours their wish, the *champa* tree snatches up the bracelets and wears them

Musa Suhág's Mosque

---

1 Mr. Burgess' Notes (1870), 42-43. Mr. Fergusson says; 'The form is very perfect. Each part increases in dignity to the sanctuary. The exterior expresses the interior more completely than even a Gothic design, and, whether looked at from its courts or from the outside, it possesses variety without confusion and an appropriateness of every part to the purpose intended.' Hist. of Arch. III. 258. According to Mr. Forbes (Bom. Quar. Rev. V. 1857, 305), in building this and other modern Jain temples the old system of division of labour in the matter of design is carefully followed. In such cases, says Mr. Forbes, no drawings are made, but the general design with the accommodation required is described in words by the merchant to the master-mason. Such lately-built temples as are within reach are examined and improvements on them are suggested either at this time or during the progress of the work, by one or other of the parties, the handicraftsmen being by no means excluded. The result is a building substantially the same as those built before it but better suited to the tastes and wants of the day.

Chapter XIV. Places of Interest.

on its arms. From Musa Suhág sprang an order of beggars who, like their master, dress in women's clothes and wear nose-rings.

AHMEDABAD.

Dáda Harir's Well.

At the village of Asárva, about a mile east of Hatising's temple, are two wells Dáda Harir's and Máta Bhaváni's. Dáda Harir's well, also known as Nurse, or *Dhái*, Harir's well, was built in 1485 by a lady of the household of Mahmud Begada, at, it is said, a cost of £30,000 (Rs. 3,00,000). At the level of the ground it is 196 feet long by forty wide. At the east end, from a domed canopy, a descent of eight steps leads to a covered gallery. A second flight of nine steps leads to another gallery, and a third of eight steps to the lowest gallery two or three feet above the level of the water. At each landing a corridor runs along the sides and leads to other galleries that cross the well at intervals. At the west end is the well, octagonal in shape, its walls richly carved, with on each side small cupolas, and under them spiral stairs leading down to the water. Behind the main well is a second well twenty feet in diameter, used for watering land. The whole is far more elaborate than the Máta Bhaváni well close by, and has no equal in Gujarát except the well at Adálaj, built about the same time by a Hindu lady[1] Rudbái wife of Rája Virsing. Close by the well the nurse built a mosque[2] and a tomb in which she was buried. The well bears two inscriptions, one in Sanskrit on the south, and one in Arabic on the north wall, of the first gallery. The Arabic writing runs: 'This holy and wholesome water; the splendid travellers' rest-house enclosed on four sides by carved and painted walls, and a grove of fruit trees with their fruit, a well, and a pool of water for the use of man and beast, were built in the reign of the Sultán of the Sultáns of the age, established by the grace of God and of the faith, Abul Fath Mahmud Sháh, son of Muhammad Sháh, son of Ahmad Sháh, son of Muhammad Sháh, son of Muzaffar Sháh the Sultán, may God keep his kingdom. Dated the metropolis of the kingdom the 2nd of Jamádi-ul-awwal in the 26th year of the reign.'[3]

Máta Bhaváni's Well.

A little to the north of the Nurse's well is Máta Bhaváni's well. It takes its name from a small shrine of the Máta on the lower gallery

---

1 According to another story, the Adálaj well was built by the sister of Bái Harir. Mr. Briggs translates the inscription as if the builder was a man not a woman, and Captain Lyon (p. 14) says 'whether man or woman is doubtful.'

2 The tops of the minarets are plain, looking from a distance like the towers of a castle. Captain Lyon, 14.

3 This gives 1485 A.D. Mr. Burgess' Notes (1870), 46. The Sanskrit inscription according to one account gives 1500 (1556 S.) as the date of the well. Briggs' Cities of Gujaráshtra, 218. According to another, it gives 1421, Captain Lyon, 14. Mr. Forbes (1781) gives the following account of the well. 'About a mile from Sháhi Bág is a large well or rather a noble reservoir, constructed by a nurse to one of the kings of Gujarát and still called the 'Nurse's well.' A grand flight of steps leads to the water through double rows of pillars and pilasters elegantly furnished far below the surface of the earth. This reservoir is all of hewn stone surrounded by galleries, ascended by circular steps and a dome supported by large columns over each, these galleries communicate with the principal stairs and add to the general magnificence. Upwards of thirty thousand pounds were spent on this munificent work, which some attribute to the nurse and others to a rich dancing-girl who erected it with the produce of one of her ankle jewels; the other she is reported to have thrown into the water to reward the search of the diver.' Or. Mem. III. 140.

generally believed to be the work of the five Pándavs. More modern than anything at Abu or Chandrávati, this well is probably older than anything else in Ahmedabad, the only remnant of the old city of Asával or Karanávati.[1] As in most large Gujarát wells, long flights of steps and pillared galleries lead down to the water and over the open shafts are raised light pillar-supported canopies.

Sháhi Bág.

About a mile and a quarter north-west of Hatising's temple is the Sháhi Bág, or the Royal Garden palace, built in 1622 by Sháh Jahán then (1616-1622) Viceroy of Ahmedabad, to give work to the poor during a season of scarcity. The Sháhi Bág gardens were in the seventeenth century famous, the resort of the whole city, and one of its chief ornaments. A century and a half later (1781), though the well was in ruins and the fountains and water-courses broken, the gardens could still boast of some noble cypresses, cedars, palms, sandals, and cassias, with mango, tamarind, and other spreading fruit trees.[2] Besides the Sháhi Bág gardens, there was, a little beyond, an older garden called the *Andhári Bádi*, or dark garden, with large ruins.[3] The palace, always kept in good repair, is thus described by Mr. Forbes in 1781: 'The saloon is spacious and lofty as the building; the walls are covered with a white stucco, polished like the finest marble, and the ceiling is painted in small compartments with much taste. The angular recesses lead to eight small octagon rooms, four below and as many above with separate stairs to each. They are finished in the same style as the saloon, the walls like alabaster and the ceiling embossed. The flat roof commands a wide view; the rooms under the saloon, and a surrounding platform ornamented with small canals and fountains, form a cool retreat.'[4] To the original centre saloon, two large wings and several rooms and terraces were, about 1835, added by Mr. Williams, of the Civil Service.[5] At a little distance from the royal mansion, on the bank of the Sábarmati, with separate gardens, baths and fountains, was the *zanána* or ladies' palace. The apartments for the officers and attendants of the court were still further detached.[6] In the great flood of 1875 the strong stone wall, which prevents the river from passing south towards the city, was slightly injured, and sand was washed over it covering and destroying the garden beds. Since this flood, along the wall the water is much deeper and the current much stronger than it was before.

---

1 Rás Mála, 198.

2 Forbes' Or. Mem. III. 136, 138.

3 Bom. Gov. Sel. X. 88. In 1638 the Sháhi Bág was very large, shut in by a great wall with ditches full of water, a beautiful house, and very rich rooms. Mandelslo, 85, 86. In 1666 Thevenot found the King's garden full of all kinds of trees. The road lay through an avenue like those in Paris. The garden was very large or rather there were several gardens rising like an amphitheatre. There were four wonderful walks fringed, on either side right across the garden, by a terrace full of flowers and meeting in the form of a cross, where was a great building with a roof covered with green tiles. The garden was the meeting place of all the young people of the city. Thevenot, V. 30.

4 Forbes' Or. Mem. III. 136.

5 Trans. Bom. Geo. Soc. VII. 110.

6 Forbes' Or. Mem. III, 137, 138.

Chapter XIV.
Places of Interest.
AHMEDABAD.

Adálaj, a village about ten miles north of the Sháhi Bág, is famous for a step-well, *bávdi*, built about 1499 (1555 S.) by Rudbái or Ruda Ráni, daughter of Rája Venu, wife to Rája Virsing a Vághela Rajput, at an estimated cost of £50,000 (Rs. 5,00,000).[1]

Cantonment.

A mile and a half to the north-east of the Sháhi Bág is the cantonment on a site chosen by Sir J. Malcolm in 1830. Details are given below (p. 331).

Miya Khán Chishti's Mosque.

Between the Sháhi Bág and the city are three old buildings, Miya Khán Chishti's mosque, Achut Bibi's mosque, and Darya Khán's tomb. About a quarter of a mile south-west of the Sháhi Bág, on high ground overlooking the Sábarmati, is Miya Khán Chishti's mosque. It was built in 1465 by Malik Maksud Vazir, brother of Malik Bahá-ud-din, for Miya Khán Chishti, whose family still claims the office of city judge or Kázi.

Achut Bibi's Mosque.

About half a mile more to the south-west, also on the bank of the Sábarmati, about a mile from the city, is Achut Bibi's mosque. It was built in 1469 by Háji Malik Bahá-ud-din, entitled Imád-ul-Mulk, one of Mahmud Begada's (1459-1511) ministers, for his wife Bibi Achut Kuki whose tomb is close by. Its large enclosure was once adorned by seven minarets, three at the outer and two at the inner entrance, and two[2] on the mosque itself. Except the lower parts of the mosque minarets, all seven were thrown down and destroyed in the 1819 earthquake.

Darya Khán's Tomb.

About another half mile to the south-east, is Darya Khán's tomb. It was built in 1453, during his lifetime, by Darya Khán, a talented but abandoned nobleman, one of Mahmud Begada's ministers. The tomb, the largest in Gujarát, is of brick with nine feet thick walls. It is a massive building, in a style that is common all over India, and has no trace of the special Ahmedabad grace. The tomb is, perhaps from its air of gloom as much as from any memory of Darya Khán's misdeeds, supposed to be haunted. On a certain day in the year Satan visits it and may be seen there at midnight.

Syed Usmán's Mosque and Tomb.

Across the Sábarmati, about three-quarters of a mile west of Darya Khán's tomb, are Syed Usmán's mosque and tomb on the site of the old suburb of Usmánpur. The Syed, who had founded the suburb of Usmánpur, died in 1458, and on his accession in the year after (1459), Mahmud Begada built this mosque and tomb. The mosque, with a minaret at each end, is in the style of the Sarkhej mosque pure Hindu without an arch. Inside, the arrangement of pillars, is neither so simple nor so clear as at Sarkhej. One peculiarity of the tomb is that its dome is supported on twelve instead of on eight pillars. This change gives much variety and the tomb is altogether the most successful sepulchral design carried out in the pillared style at Ahmedabad.[3]

---

1 Bom. Gov. Sel. X. 88, and Rás Mála, I. 345.
2 Like those of the Jáma mosque, these two minarets were easily shaken. Briggs' Cities of Gujaráshtra, 265.
3 Fergusson's Hist. of Arch. III. 534, 535.

Chapter XIV.
Places of Interest.
AHMEDABAD.

About a mile and a half east of the city, in the Saraspur suburb beyond the railway station, is a neglected Jain temple known as the temple of Chintáman. This is a place of some historic interest. Finished about 1638 at a cost of £90,000 (Rs. 9,00,000) by Sántidás a rich Vánia merchant, it was one of the handsomest buildings in the city. The temple was in the centre of a great court, which was surrounded by a high wall of cut stone, with a cloister running all round divided into cells with in each a naked statue of black or white marble. Before the entrance were two life-size black-marble elephants with the image of Sántidás on one of them. The roof was domed and the walls adorned by many images of men and beasts.[1] A few years later, apparently in the religious riots of 1644-46, Aurangzeb defiled the temple by having a cow's throat cut in it, and, breaking the images, changed it into a mosque. The Jains petitioned the Emperor Sháh Jahán, and he much displeased with Aurangzeb, ordered him to restore the temple to its former condition. In 1666 Thevenot[2] speaks of the building as a mosque. But this seems doubtful as the cloister shrines had still their Jain saints' images, and inside though their noses were broken the walls were still filled with figures of men and animals. Sántidás saved the chief image and taking it into the city built a temple for it in Jawheriváda.

Sántidás' Temple.

About a mile south-east of Saraspur, just beyond the village of Rakhiál, is the Malik Shábán lake. This, octagonal in shape, built of stone, and covering an area of thirty-five acres, is in good order, and in seasons of average rainfall holds water throughout the year.[3]

Malik Shábán's Lake.

About three-quarters of a mile south-east of the Ráypur gate, is the Hauz-i-Kutub, Kutub's pond, or the Kánkariya, that is the lime-pebble, lake. This reservoir, probably the largest of its kind in India, is a regular polygon of thirty-four sides, each side 190 feet long and the whole more than a mile round. The area is seventy-two acres. Details are given (p. 17) under lakes in Chapter I.

Kánkariya Lake.

On the left bank of the Kánkariya lake are some Dutch and Armenian tombs Saracenic in style with domes and pillars. The dates as far as they have been deciphered range from 1641 to 1699[4]. The Armenian tombs perhaps belonged to brokers in the Dutch factory.[5]

Dutch Tombs.

About three quarters of a mile south-west of the Kánkariya lake, a little to the west of the Kaira road, is Malik A'lam's mosque, built

Malik A'lam's Mosque.

---

1 Mandelslo's Voyages, 77.
2 Thevenot's Voyages, V. 28.
3 Bom. Gov. Sel. X. 87.
4 Among the inscriptions are, Begraven Dalniel Aima obiit 23rd April anno 1664; Begraven Cornelius Weyus van Banda. Died 12th January 1669; Johann Millissen Onder Chirurgy. Died 5th August 1679; Wilhelm Huysman. Died 28th October 1699. Briggs' Cities of Gujaráshtra, 264, 265. Mr. Forbes says some of the dates are early in the seventeenth century. He gives no examples. Or. Mem. III. 131. If there are any so old, one of the tombs might be Aldworth's who established the English Company's factory in Ahmedabad and died there in 1615. Anderson's Western India, 8.
5 Briggs' Cities of Gujaráshtra, 265. In the seventeenth century (1680) there were Armenians enough in Ahmedabad to have a church. Ogilby's Atlas, V. 209.

Chapter XIV. Places of Interest. AHMEDABAD.

in 1422 by one of Sultán Ahmad's sons-in-law, Malik A'lam bin Nur Kabir, styled Vazir-ul-Mamálik. Compared with the earlier buildings it shows greater skill in fitting the niche and ornament of the Hindu spire to the base of the Muhammadan minaret.

Sháh A'lam.

About a quarter of a mile further south is a group of buildings, a tomb, a mosque, and an assembly hall, enclosed by a lofty and bastioned wall, sacred to the memory of Sháh A'lam, the son of Kutb-ul-A'lam of Batva, who, till his death in 1475, as the guide of Mahmud Begada's youth, and afterwards as one of the most revered of Musalmán religious teachers, held a high place in Ahmedabad. From the north the enclosure is entered through two handsome stone gate-ways. Within the second gate on the left is an assembly hall built by Sultán Muzaffar III. (1561-1572), and partly destroyed by the British in 1780 to furnish materials for the siege of the city. On the right are some other buildings of which the date has not been traced. In front of these buildings, to the right is a handsome reservoir, and to the left of the reservoir in the centre of the enclosure, is Sháh A'lam's tomb. This, the oldest of the buildings, is said, soon after the saint's death (1475), to have been raised by Táj Khán Nariáli a nobleman of Mahmud's court. It is of very pleasing design and has much of the special character of the buildings of that time. Early in the seventeenth century A'saf Khán, the brother of the famous Nur Jahán, ornamented the dome with gold and precious stones.[1] The floor of the tomb is inlaid with black and white marble, the doors are of open cut brass work, and the frame in which the doors are set, as well as what shews between the door frame and the two stone pillars to the right and left, is of pure white marble beautifully carved and pierced. The tomb itself is completely enclosed by an inner wall of pierced stone. The outer wall in the north is of stone trellis work of the most varied design.[2] West of the tomb is the mosque, built by Muhammad Sálah Badakhshi, with minarets at either end begun by Nizábat Khán and finished by Saif Khán.[3] The mosque though pleasing in outline and with skilfully constructed domes[4] has, like Muhammad Ghaus' (p. 269) mosque, much of the ordinary Muhammadan form found in other parts of India, and scarcely belongs to the special Ahmedabad style. To the south of the mosque, a tomb on a plan similar to that of the chief mausoleum, is the burying place of Sháh A'lam's family. Outside of the wall to the west is a large reservoir built by the wife of Táj Khán Nariáli.

---

1 A'saf Khán was in Ahmedabad with the Emperor Jahángir in 1618. Thevenot (1666) speaks of the very beautiful mother of pearl wood work and brass window-screens cut in different patterns. Voyages, V. 28. The brass work lately renewed shows that the Ahmedabad coppersmiths have lost none of their cunning.

2 Captain Lyon, 14. In this mausoleum is buried Shaikh Kabir, renowned for his learning, who died in 1618 (1026 H.). Blochmann's Ain-i-Akbari, I. 547.

3 The minarets were much damaged by the 1819 earthquake. Since 1863 they have been repaired and are now in good order.

4 As in Muhammad Ghaus' mosque (p. 269) the skill with which the corners are cut off to receive the circular dome deserves notice.

Chapter XIV.

Places of Interest.

AHMEDABAD.

Batva.

At Batva, more than three miles further along the Kaira road, is another group of buildings, two tombs and a mosque raised in memory of Sháh A'lam's father and brother. Burhán-ud-din Kutb-ul-A'lam, the father of Sháh A'lam, was the grandson of a famous saint buried at Uch on the Sutlej. Attracted to the court of Sultán Ahmad I. (1411-1443), he settled at Batva and died there in 1452. The nobles of the courts of Sultán Ahmad, Sultán Kutb-ud-din, and Sultán Mahmud Begada, first raised a small shrine, and afterwards a mosque, a tomb to one of his sons, a large many-sided pond, and a vast mausoleum. The mosque and son's tomb are, as at Sarkhej, in the flat Hindu style without arches or minarets. But in the large mausoleum, with a great gain in size, the arch takes the place of the beam, and the dome is raised high in air by a second tier of arches. The arch, uniformly used with one consistent design, has much beauty and propriety. The tomb is of the most elaborate workmanship surmounted by a richly inlaid canopy. But the building is incomplete, it wants the outer aisles and has no stone trellis work in its windows.[1]

Pirána.

Near the village of Giramtha, about nine miles south of Ahmedabad, in a rich, well-wooded, and waving country, lies the monastery of Pirána. Surrounded by a strong wall, its fine mausoleums, *rozás*, known as Imámsháh's, Nursháh's, Surábhái's, Bála Muhammad's, and Bákar Ali's, have none of them any claim to architectural beauty.[2] Imámsháh's, the chief mausoleum, is at present in the hands of Nathu Shámji, a Leva Kanbi by caste, known by the title of *káka*, or uncle. Belonging to the tombs are seventy-five houses, held by about fifty persons, servants and recluses, *kákás*. The yearly income, of about £1000 (Rs. 10,000), is spent chiefly in doles, *sadávarts*, of cooked or uncooked food to Hindu and Muhammadan beggars.

Of the origin of these buildings the story is, that in 1449 (1505 S.) a Syed named Imámsháh came from Persia into Gujarát and settled on a hillock at the entrance of the Giramtha village. For three years no rain had fallen, and the village land-owners, *pátidárs*, feeling him to be a holy personage, prayed him to bring rain. He said rain would come, and when it came the people chose him as their spiritual guide, *guru*. A shed was built for him to the west of the village where an arrow shot by him had fallen. Soon after this, Muhammad II. (1441-1451) king of Ahmedabad, camping near

---

1 Mr. Fergusson seems to take for granted that the arcades were ruined from some fault in the building. But Mr. J. F. Horner, who lately (1877) examined the mausoleum, is satisfied that it was never finished. Mr. Horner's view seems supported by the want of stone trellis work in the upper windows, and by the fact that Syed Mubárak's tomb at Mehmadabad, of the same style and age, and possibly by the same architect, is still perfectly strong.

2 Mr. Forbes who visited the shrine in 1781 describes them as of white marble adorned with ostrich-eggs, rows of false pearls, and wreaths of flowers. The walls pillars and domes of the mouldering edifices which contain them, were inlaid with small locking-glasses, agates, and carnelians, more gaudy than elegant and very inferior to the shrines at Batva. The tracery of the windows was neat, and filled with stained glass from Europe in the manner of our own cathedrals. Or. Mem. III. 161.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Pirána.

Giramtha, heard of Imámsháh's miraculous power, and by several tests[1] satisfying himself that the holy man was no impostor, took him to Ahmedabad, and gave him his daughter in marriage. By her he had four sons the ancestors of the present Pirána Syeds.

As he grew old Imámsháh began to build his tomb, spending on it, it is said, about £15,000 (Rs. 1,50,000).[2] When he finished building the tomb, Imámsháh had five chief followers: Házarbeg, a Musalmán; Babherám, a Leva Kanbi cart-driver; Nága Káka, a Koli; Shára Káka, a Leva Kanbi; and Chichibái, Babherám's sister. Feeling his end drawing near, Imámsháh told Házarbeg that he too would soon die, that he would be buried near Imámsháh's tomb, and that his grave would keep cool though baked by the sun, and would be the first to be strewed with flowers. Babherám and his sister he sent to Petlád; Nága Káka to Rewa Kántha, and to Shára Káka he gave the charge of the shrine. Imámsháh died soon after, and was buried in the mausoleum. In the month of *Ramzán*, the anniversary, *uras*, of his death is held, with a fair attended by a large number of Hindus. Fairs are also held on the second day of every month, and in August, *Shrávan*, on Gokal A'tham and Daro A'tham, and in September, on the *Bhádarva Sud agiáras*. His disciples are chiefly Bráhmans, Vániás, Leva and Kadva Kanbis, and Káchhiás. None of them are Musalmáns.[3] The head or holder of the cushion, *gádi*, has to give up all worldly concerns; to wear a yellow-coloured waist cloth and sheet, and a white coat and turban as signs of humility, and to let the beard grow. On his death, the ablest of the Leva Kanbi disciples is chosen successor, the present manager being the twenty-first in order. The followers of Imámsháh, known as Imámsháhis, form a large body in the districts of Burhánpur, Surat, and Khándesh. They are also found in Cutch, Káthiáwár, Baroda, Cambay, and Kaira. Many Ahmedabad villages have large buildings called *khána*, or, *poshál*, belonging to this sect, where the devotees, *kákás*, stay when on tour, and where the disciples meet every day and say prayers to Imámsháh. In the Jamálpur quarter of the city is a building of this sort, with a congregation of about 200 souls.

Nursháh's, the second of the five shrines, is worshipped almost entirely by Ahmedabad city Momnás. They have no establishment at Pirána except a devotee, who lives there with his family to light the lamp at the tomb. The followers are called Nursháhis.

Surábhái's, the third of the shrines, is, as the name shows, not a tomb but a cushion, *gádi*, that is a place reverenced as the seat of a saint. The followers, called *Pánchiás*, from the five devotees who

[1] To test Imámsháh, the king made him drink milk mixed with poison, but this did him no harm; then he set cooked cat's flesh before him, but at Imámsháh's word of command the cat jumped up alive; finally, the king sent some meat in a covered dish, saying he had sent some roses, the lookers-on were surprised when Imámsháh, taking off the cover, handed round rose leaves.

[2] One story of the building is that Imámsháh's practice was to seat himself on a cushion and pay the workmen with money taken from under it. The Koli labourers, thinking that treasure must be hid, came one night and dug, but found nothing. Next evening at pay-time the holy man gave those that had tried to steal, a double allowance, telling them it was for the extra work done during the night.

[3] This and other details are from an account given by the Pirána manager, 28th October 1871.

at first managed the institution, are cowherds, Rabáris, of the village of Bálishana under Pátan, and Sirohi, Bombay, and Cutch goldsmiths and coppersmiths. The manager, Báji Surjibhái, belongs to the Shekhda sect, a class of people of Hindu origin.

Bába Muhammad's, the fourth shrine, is venerated by Musalmáns of the Shekhda sect. The owner also is a Shekhda. The followers are called *Sátiás,* from the seven original managing devotees.

Bákar Ali's, the fifth shrine, was built in 1832 (1888 S.). The followers, called *A'thiás,* from the eight devotees who managed the institution, are found in Ahmedabad, Mahi Kántha, Baroda, and Surat. Several Káthiáwár vegetable sellers, *Káchhiás,* goldsmiths, and carpenters, belong to this sect.

Of the origin of this shrine the following details are recorded: Akal Miya, the founder, is said to have been a Sindhi, who, taking a Syed's garb and claiming descent from Imámsháh, succeeded in obtaining a license, *parvánáh,* from the Emperor at Delhi, authorizing him as Imámsháh's descendant to take charge of his tomb. On his arrival at Pirána the managers and Syeds were away, and he very easily gained possession of the tomb, and kept it for two years. Then the former devotees, *kákás,* complained to the Marátha Governor of Ahmedabad, who sent both plaintiffs and defendants to Poona. The Syeds succeeded in proving their claim, showing a largely signed petition in their favour, and Akal Miya had to bind himself in the sum of £2500 (Rs. 25,000) to keep the peace and give up the place to the *kákás* and Syeds. After this, Akal Miya's descendants settled at Ahmedabad and Cambay. During the time of Akal Miya's grandson they bought a plot of land in the viliage; but, as the orders of the Peshwa forbade them and their family from living or raising any buildings at Pirána, no shrine was built till in 1832 after the death of Bákar Ali, the fourth in descent from Akal Miya. In time the *roza* had several disciples, and a yearly income of £500 (Rs. 5000). In building it, and some houses connected with it, a debt of £8000 (Rs. 80,000) was incurred. The followers then took the place and its belongings, paid off the debt, and settling a yearly allowance of £50 (Rs. 500) on Husain Miya, an adopted son of Bákar Ali's, placed a Kanbi *káka* in charge. Besides the five chief shrines, there are smaller ones to Wálamsháh under the same management as Nursháh's, to Syed Khán and to Sajji Miya, and one known as *Dádi-ni-Gumti,* or Dádi's tomb.

The arrangements for cooking and for lodging travellers are in the hands of religious ministrants, *mujávars,* who never marry or follow any worldly calling. These men are children of followers of the Pirána saints, among whom it is usual to bring up the eldest to their own calling and set apart a younger son to Pirána.

The Pirána worshippers belong to three classes: foreign Musalmáns, local converts, and Hindus. The foreign Musalmáns are Syeds, the descendants of Imámsháh, who are called saint's sons, *pirzádás,* and in their religious observances do not differ from other Shia Musalmáns. Of local converts there are three classes: Momnás, Shekhs or Shekhdás, and Matia Kanbis. The Momnás, Musalmáns

Chapter XIV.
Places of Interest.
AHMEDABAD.
Pirána.

of the Shia sect, belong to four divisions: Imámsháhi, Nursháhi, Masháikhsháhi, and Mahmudsháhi. These classes are distinguished from one another by the extent to which they have given up Hindu practices and follow the Musalmán law. Some wear the beard, others shave the chin, while the change in the religious customs of others is so slight that they still worship lamps. They all venerate the shrines at Pirána, particularly that of Nursháh, the affairs of which are entrusted to their management. In 1691, on account of the ill-treatment of their head Syed Sháhji, the Momnás rose in revolt. Marching against Broach, they seized the fort, and slew the governor. But after a few days they were attacked and defeated with great slaughter.[1] The Shekhs or Shekhdás, except that they bury their dead, differ little from Hindus. They are not circumcised, and do not eat with Musalmáns; they wear forehead marks, and many of them belong to the Svámi Náráyan community. In their customs Matia Kanbis closely resemble Shekhdás. The Hindu worshippers are Bráhmans, Vániás, Leva and Kadva Kanbis, Káchhiás, goldsmiths, carpenters, and cowherds. They observe Hindu holidays, obey caste rules, read their own religious books, and, except that their reverence for Imámsháh leads them, after burning their dead to bury the bones at Pirána, they are like other Hindus.[2] The shrine managers, *kákás*, who belong generally to the Leva Kanbi caste, so far differ from the other Hindu followers that they take vows of celibacy, wear yellow clothes, and bury their dead.

The book of religious precepts, *shiksha patri*, written by Imámsháh is supposed to be read by all. The common form of prayer is, by the people, a repetition of the word '*Shivoham*,' or 'I am Shiv,' and by the Kákás, '*Imám Kevalah*', or 'The Imám (that is Imámsháh) is The One God.' Though some worship him as a deity, most of his followers do not consider Imámsháh more than a religious teacher or saint. All fast on the second and fourth days of each of the twelve months, and during the whole of the month of *Ramzán*.

Further west near the city, about half a mile outside of the Jamálpur gate, are two buildings, Bába Lului's mosque and Mir Abu Turáb's tomb.

Bába Lului's Mosque.

The Bába Lului mosque, of the same age and style as the Sháháp ur mosque, was about 1560 built by Bába Lului, or Bába Muhammad, a pearl merchant. It is, on the whole, more pleasing than the Sháháp ur mosque; for though the central dome wants dignity, the contrast between the styles of the wings and centre is less striking.

Mir Abu Turáb's Tomb.

This tomb was built late in the sixteenth century by Mir Abu Turáb, a nobleman of talent and power who had much to do with the settlement of Gujarát under the Emperor Akbar (1573-1583). In 1579, appointed chief of the Mecca caravan, he brought back a stone with the mark of the Prophet's foot. Taken first to the Emperor

1 Watson's Gujarát History, 82.

2 This practice of burying bones has given rise to the belief that the Gujarát followers of the Pirána saint, cut off one of the little fingers of the dead body, and bury it in the house raising a tomb over it. The people deny that this story has any truth.

Mir Abu Turáb's Tomb.

at Fatehpur Sikhri, the relic was afterwards brought to Ahmedabad, and perhaps near this tomb, had a building raised over it, and drew large numbers of pilgrims. In the disturbed times of the eighteenth century, as the suburbs were no longer safe, the stone was taken within the city walls.[1] Abu Turáb's tomb is simple and graceful, forty-one feet square with a double colonnade of pillars, the inner colonnade formerly enclosed by stone trellis work. Local in style the tomb shows the art in its best form. The flat lintels have throughout given place to the arch, and as no rich minaret-bases clash with the plainness of the main building, the whole is uniform and pleasing. On each face three large and two small arches point to the presence of an octagonal dome, and, without confusing, relieve the sameness.

A'zam and Mozam Kháns' Tombs.

On the road from Ahmedabad to Sarkhej, about 1¾ miles from the city, is a massive brick mausoleum containing the tombs of A'zam Khán and Mozam Khán, two strangers from Khurásán, believed to have been the architects of Sarkhej. The tomb was probably built about 1457. Like Darya Khán's tomb, it is a solid heavy building with no trace of the special Ahmedabad style.

Sarkhej.

About 3½ miles beyond A'zam Khán's tomb is Sarkhej, a village to which Shaikh Ahmad Khattu Ganj Bakhsh of Anhilváda,[2] the friend and adviser of Sultán Ahmad I. retired, and where in 1445 he died. In his honour a tomb,[3] begun in 1445 by Muhammad II., was, in 1451, finished by his son Sultán Kutb-ud-din. Afterwards Sarkhej was one of Mahmud Begada's (1459-1511) favourite resorts. He dug a large lake, surrounded it with cut stone steps, built on its south-west corner a splendid palace, and finally, opposite to the saint's tomb, raised a mausoleum for himself and his family, where he, his son Muzaffar II. and his queen Rájbái are buried.

Entering the covered eastern gateway on the north bank of the Sarkhej lake, the building to the right with a handsome stone-pavilion[4] in front of it, is the mausoleum of Shaikh Ahmad Khattu Ganj Bakhsh. This, the largest of its kind in Gujarát, has during its whole length its sides filled with stone trellis work, and inside, round the tomb, has a beautifully cut open metal screen. Across the courtyard on the left are two mausoleums with a connecting porch, the east mausoleum containing the tombs of Sultán

---

1 Abu Turáb, one of the Salámi Syeds of Shiráz in 1582 (987 H) brought a large stone from Mecca with a footprint of the Prophet. This stone is said to have been the same which Syed Jalál-i-Bukhári brought to Delhi at the time of Sultán Firoz. Akbar looked on the whole as a pious fraud, and though the stone was received with great respect, Abu Turáb was allowed to keep it in his house. When (1583) Itimád was made Governor of Gujarát, Abu Turáb followed him as Amin of the Subha and was buried at Ahmedabad in 1597 (1005 H). Blochmann's Ain-i-Akbari, I. 507. Compare the more enthusiastic Mirát-i-Ahmadi account, Bird, 350-351.

2 He is called the lamp of the Salsalah-i-Maghribiyáh or Maghribi (western) sect. Blochmann's Ain-i-Akbari, I. 507.

3 Over the door of the mausoleum are these words:

"When the ocean of Ahmad's palm scatters pearls,
Hope's hem becomes the treasure of Parwiz.
No wonder if in order to bend before his shrine,
The whole surface of the earth raises its head."

Arch. Surv. Rep. 1874-75, 10.

4 This pavilion, with its sixteen pillars and pleasing roof of nine small domes, deserves notice.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Sarkhej.

Mahmud Begada (1459-1511), and of his son Sultán Muzaffar II. (1511-1526), and the west, the tomb of Rájbái Muzaffar's queen.[1] Beyond the Ganj Bakhsh mausoleum is a courtyard, covering more than an acre of ground, surrounded by cloisters, with, at the west end, a mosque only slightly smaller than the Jáma mosque. The want of minarets and the shallowness of its eaves rather mar the outside effect. But inside 'it is the perfection of simple grace unrivalled in India except by the Moti mosque at Agra.' Looking across the lake the ruined buildings at the south-west corner are Mahmud Begada's palace and *harim*. The lake covering 17½ acres[2] is a work of great beauty. Oblong in shape, it is surrounded by flights of stone steps, and has a most richly decorated supply sluice. With the lake the Sarkhej buildings form the most beautiful group in Ahmedabad. Belonging to the best period of the style, they are throughout marked by purity and grace, and have the special interest of being almost purely Hindu, with only the faintest Musalmán feeling. The only arches are three at the entrance gateway, and one great constructive arch in the palace. The rest is as completely Hindu as the temples on Mount Abu. Besides the chief group of remains, the country round is studded with mosques and other old buildings. A little to the south of the lake is a small ugly white-washed tomb, the burial place of Bába A'li Sher, a saint held in higher respect even than Ganj Bakhsh.[3] Close by are the remains of Mirza Khán Khánán's (1583-1590) *Fateh Bádi* or victory garden, laid out in 1584 to mark his defeat of Muzaffar III. the last of the Ahmedabad kings. In the seventeenth century Sarkhej was so famous for its indigo that in 1620 the Dutch established a factory in the village.[4]

Section III.—Population.

Population.

Of the population of the city at the time of its greatest prosperity, either in the fifteenth or seventeenth century, no information has been obtained.[5] In 1780, when taken by General Goddard, the population was estimated at upwards of 100,000.[6] In 1811, after ten years of good management under the Gáikwár, the total is returned

---

1 There was buried at Sarkhej, Ghazáli of Mashhad, unrivalled in depth of learning and sweetness of language, at home in the noble thoughts of the Sufis. He died on the 27th Rajab 980 (A.D. 1575) and was buried by Akbar in Sarkhej. Blochmann's Ain-i-Akbari, I. 568.

2 Mandelslo (1638) speaks of it as a great lake, full of water, shut in by a wall pierced on all sides by many windows. Voyages, 84.

3 Bom. Gov. Sel. X. 87.

4 Stavorinus, III. 109; Sarkhej was (1638) a great place of pilgrimage growing the best indigo in Gujarát, Mandelslo's Voyages, 84; all the indigo sold in Ahmedabad comes (1666) from Sarkhej, Thevenot s Voyages, V. 32.

5 Forbes (Or. Mem III. 150) states, on the authority of 'Moghal writers,' that about 1615 Ahmedabad had a population of 3,000,000 souls, and Mr. Hope (Arch. of Ahmedabad, 27) speaks of 'above 2,000,000 souls.' But it seems probable that Ahmedabad was never so rich or so populous as during the latter part of the seventeenth century, and none of the available accounts written by European travellers at that time point to any thing like so large a population.

6 Grant Duff, 430: Forbes' Or. Mem. III. 150, next year (May 1781), gives 300,000 as the population. But there seems no reason to suppose it had increased since 1780.

at 200,000, a number that the famine and pestilence of 1812 and 1813 are said to have reduced by one-half.[1] In 1817, at the time of transfer, the population is returned at 80,000.[2] Since then it has slowly increased to 87,000 in 1824; 90,000 in 1832[3]; 94,390 in 1846; 97,048 in 1851, and 116,873 in 1872.[4] As late as 1781 about two-thirds of the city population are supposed to have been Musalmáns.[5] But since 1817 Hindus have been more numerous, the proportion increasing from about 76·31 per cent in 1824 to 79·24 per cent in 1872.

In 1872, of the total population of 116,873 souls lodged in 35,284 houses, 92,619, or 97·24 per cent were Hindus; 23,491, or 20·09 per cent, Musalmáns; 446, or 0·38 per cent, Pársis; 40 Jews; 264, or 0·22 per cent, Christians; and 13 'Others' not included in any of these classes.

Details.

The following is a summary of the available information regarding the strength, occupation, and condition, of the different sub-divisions of the Ahmedabad townspeople. Among Hindus, Bráhmans, 10,754, except Nágars who are chiefly in Government service, middling; Shrávaks, 11,763, traders, merchants, and money-lenders, prosperous; Vániás, 8952, chiefly traders, a few well-to-do, the rest poor; Luvánás, 380, milksellers, turners, and shopkeepers, middling; Brahma-Kshatris, 226, Government servants and pleaders, well-to-do; Káyasths, 105, and Parbhus, 45, chiefly clerks in Government offices, well off; Kanbis, 19,440, money-lenders, traders, weavers, and cultivators, as a class well-to-do; Káchhiás, 1308, vegetable sellers, middling; Mális, 446, flower sellers, middling; Khamárs, 361, weavers and traders, prosperous; Bhávsárs, calicoprinters, and Chhipás, calenders, 2939, middling, a few are rich and many poor; Khatris, 2624, weavers, middling, a few are rich and many poor; Sálvis, 455, weavers, a few are rich; Ghánchis, oil-pressers, 2852, engaged in various callings, well-to-do; Sonis, goldsmiths, 2830, prosperous; Suthárs, carpenters, 2018, prosperous; Kansárás, coppersmiths, 644, prosperous; Luhárs, blacksmiths, 1876, prosperous; Kadiás, bricklayers, 1475, prosperous; Saláts, masons, 26, middling; Darjis, tailors, 886, middling; Kumbháras, potters, 1608, middling; Hajáms, barbers, 1365, middling; Dhobhis, washermen, 484, middling; Bhistis, 64, water-bearers and hack-cart drivers, poor; Rajputs, 1463, servants and labourers, poor; Gandhraps, 30, Bháts, 194, and Chárans, 11, songsters and bards, poor; Golás, 643, ricepounders and rice sellers, middling; Bhois, palanquin bearers,

---

1 Ham. Desc. of Hin. I. 698. 200,000 is probably an excessive estimate. Judging by the 1817 figures, at the end of the pestilence the population was not more than 60 or 70,000.

2 Briggs' Cities of Gujaráshtra, 249.

3 Briggs' Cities of Gujaráshtra, 209.

4 The total 101,675, recorded in the 1824 survey, was calculated on a total of 29,050 inhabited houses with an average of 3½ souls to each house. This has been changed to 87,000 souls, as the census of 1846 and 1851 showed that the average household did not contain more than three persons. In the next year (1825), Mr. Crawford, in connection with a proposed house tax, gives the number of houses at 25,820 instead of 29,199. The survey figures are the most trustworthy, as from the nature of Mr. Crawford's inquiry the return was probably incomplete. The 1846 census gives 32,221 and the 1851 census, 33,329 houses. Briggs (Cities of Gujaráshtra, 249) gives 100,000 persons for 1847, and Thornton 130,000 for 1857, but these are estimates.

5 Forbes' Or. Mem. III. 150.

Chapter XIV. Places of Interest.

AHMEDABAD. Population. *Details.*

462, poor; Khalásis, tile-turners, 163, poor; Purabiás and Maráthás, 1110, Márvádis, 504, Sadhars, 111, Bávchás, 340, and Pomlás, 20, labouring classes, poor; Bhádbhujás, grain parchers, 72, poor; Kaláls, tavern-keepers, 48, well-to-do; Bharváds and Rabáris, shepherds and herdsmen, 61, poor; Lodhás, grass-sellers, 257, middling; Vághris, 1365, fowlers, hunters and beggars, as a class poor, a few families are well-to-do; Rávaliás, 495, cotton-tape makers and beggars, as a class poor; Mochis, shoemakers, 1181, middling, a few rich; Chámadiás, tanners, 433, poor; Dabgars, drum makers, 71, middling; Kolis, 2070, and Bhils, 113, poor; Dheds and Bhangiás, depressed classes, 4160, poor; religious beggars, 956, of whom Shrávak Sádhus (Márgis, 191, Tapás, 37) number 228, Dhundia Sádhus, 15, Svámi Náráyan Sádhus, 315, Gosáis and Vairágis, 261, Kabirpanthis, 52, Rámánandis, 36, Brahmacháris and Sanyásis, 49; other beggars, 179; miscellaneous Hindus not included in any of the above classes, 181.

With the exception of 1594 Bohorás and 281 Memans, who are traders and in good condition, the Musalmáns, Government messengers, constables, petty shopkeepers, weavers, and labourers are poor. Pársis numbered 446; Government servants, traders, shopkeepers, and artisans, they are well-to-do. Jews, 40, clerks and hospital assistants, some well-to-do, the rest middling. There were besides, 264 Christians and 13 'Others' not included under any of the above classes.

Houses.

In 1872, the city population of 116,873 souls was lodged in 35,284 houses, 31,405 of them of the better, and 3879 of the poorer sort. The average household was 3·35 persons in the better houses and 3·01 in the poorer. The dwellings are unequally distributed over the whole city. The western divisions, with many open spaces, have only about 50 persons to the acre compared with about 125 in the eastern.[1] The houses (p. 323) are chiefly upper storied of brick and mortar with tiled roofs. Compared with Surat, timber is dear and scarce, and there is much less rich wood carving. In many parts of the town a dead wall faces the street, the windows being on the inner side looking on an enclosed courtyard. One peculiarity of Ahmedabad is its great number (356)[2] of house groups, *pols*, literally gates. These seem to date from the time of divided rule (1738-1753) when Musalmán and Hindu fights were specially common. Afterwards (1780-1832), when, in their decay, the town walls ceased to shelter from robbers, the *pol* gate and watch must have been a very necessary protection.

Pols.

Each *pol*, or house group, has only one or at most two entrances, protected by a gateway closed at night as a safeguard against thieves. Inside is one main street, with crooked lanes branching on either side. Most vary in size from five or ten to fifty or sixty houses. One of them, the Mandvi *pol* in the Jamálpur division, is much larger than the rest

---

1 The details are Sháhápur, 46·96; Jamálpur, 68·24; Daryápur, 114·77; Khádiya, 141·38. Sanitary Comr. to Gov. A-680, July 16, 1875.

2 Of 356 *pols*, 275 are main and 81 under; Sháhápur has 40, all of them main *pols*; Daryápur has 132, 77 of them main and 55 under; Khádiya has 115, 108 of them main and 7 under; and Jamálpur has 69, 50 of them main and 19 under. Mr. Fernandez.

AHMEDABAD.
Houses.
Pols.

and includes several smaller *pols*, with an area of about fifty acres and a population of 10,000 souls. *Pols* are almost entirely inhabited by Hindus, in some cases by a settlement of families belonging to one caste, and in others by families of several of the higher castes, Bráhmans, Vániás, Suthárs, and Kanbis. Most of the *pols* have been established and provided with a gateway, at the expense of some leading man whose name the *pol* in many cases bears, and whose family holds a position of respect as the heads of the *pol*. Each *pol* has generally its own watchman and its own sanitary arrangements. The Ahmedabad talent for combining is shown in the management of the *pol* affairs. The house property in the *pol* is to some extent held in common. Formerly no man could sell or mortgage a house to an outsider without first offering it to the people of the *pol*. Though this rule is not now kept, inmates of a *pol* are careful to sell to men of their own class and never to people of low caste. When a house is mortgaged or sold, the people of the *pol* have a right to claim from one-half to two per cent of the money received. Again, on wedding and other great family occasions, each householder is expected to feast the whole *pol*, and in some cases all the men of the *pol*, though not of the same caste, are expected to attend any funeral that may take place. If the *pol* rules are slighted, the offender is fined, and, in former times, till he paid, he was not allowed to light a lamp in his house or to give a feast. The money gathered from gifts, fines, and the percentage on house property sales, forms a common fund managed by the leaders, *seths*, of the *pol*. This is spent on repairs to the *pol* gate, the *pol* privies, or the *pol* well. The *polia* or gate-keeper is not paid out of the fund. He earns his living by begging from the people of the *pol* and works as a labourer for them.

Style of Living.

Compared with south Gujarát the Ahmedabad style of living is, among Hindus frugal and thrifty, and among Musalmáns careless and costly. Among Hindus, the lower classes, especially the craftsmen, are much soberer than those of Surat, and the upper classes, at least equally frugal in every day life, give public feasts on a much smaller and less costly scale. Of late years a fondness for good living, pleasure, and show has increased, and, among the Ahmedabad Shrávaks, their inborn love of gambling shows itself in the large sums they win and lose at the Vastrál bullock races. But, so far, compared with Surat Vániás the love of pleasure and show is unusual. On the other hand, except the Bohorás and Memans, thrifty and well-to-do classes, the Ahmedabad Musalmáns affect a showiness in their dress, and on holidays and fair days, and at marriages, births, and deaths spend sums that sink them in debt.

Caste Lodges.

Within the city there are sixty-four Hindu caste lodges, *vádis* and *dharmshálás*, fourteen in the Sháháp̄ur, thirteen in the Daryápur, twenty-three in the Khádiya, and fourteen in the Jamálpur division. Of these, forty-eight are able to hold not more than 500 persons; eight, between 500 and 1000; two, between 1000 and 1500; three, 2000 each; one, 3000; and two, 10,000 each.

Sháháp̄ur Division.

In Mirzápur, the Bákar Ali's lodge, able to hold 10,000 persons, is used by all classes of people who belong to his sect. The lodge

Chapter XIV.
Places of Interest.

Caste Lodges.
Sháhápur Division.

contains Bákar Ali's cushion, *gádi*, before which the devotees and followers assemble and pray; and every Monday twenty pounds of grain are distributed among the poor. The followers give yearly one-tenth of their income, and the fund at present amounts to £40 (Rs. 400). The repair and other charges are met from these contributions. In Kánikhád is the Bechardás rest-house built about 1872, and able to hold about 300 inmates. Hindu pilgrims and travellers are, as a rule, allowed to put up here for a day, and are offered a day's food. The expenses are borne by Ráo Bahádur Bechardás Ambáidás, C.S.I. In front of Bukhára's *pol*, and able to hold 500 persons, Bárot Kuvar Bájibhái's lodge was built about 1849. It contains a Mahádev's temple and is used for Hindu caste dinners. The repair and other charges are borne by the owner. Built by the ancestors of Lallubhái Mangaldás, the Jháloda Vániás' lodge is able to hold 600 persons and contains a temple of Hemja Máta. It is used by Jháloda Vániás for caste dinners. The repair and other charges are borne by the caste committee. Near the Sháhápur spinning and weaving mill, and out of the mill funds, a lodge able to hold 40 inmates, was built about 1869, and set apart for the use of the maimed, disabled, and homeless, who are attended to, and given food and clothes. The expenses are borne by Mr. Ranchhodlál, the owner of the mill. Near Rangila *pol*, about 1859, the *Tániás'*, or gold thread drawers' guild, at a cost of £800 (Rs. 8000), built, for caste dinners, a lodge able to hold 2000 persons. The alms-house, *sadávart*, formerly attached to the lodge, has, within the last six months, been closed from want of funds. The charges were borne by the trade guild from entrance fees and other sources of income. Near Navávás, about 1839, at a cost of £600 (Rs. 6000), the *Rentiáválás'*, or silk spinners' guild, built a lodge able to hold 200 persons. It contains a Mahádev's and a Rám's temple, and is used for caste dinners. If a devotee, *sádhu*, puts up at the place, he is fed. The charges are met by the trade guild from entrance fees and other fines. In Bukhára's *pol*, built about 1729, the Báva Sarasvatigar's lodge is able to hold 200 persons and contains a temple of Bechráji, where, all day and night, a butter lamp is burned. Rice-pounders, potters, and Kanbis share the expenses of this lodge. Near Juni A'mbli, about 1849, the potters, Kumbhárs, at a cost of £200 (Rs. 2000) built a lodge able to hold 1400 persons. It contains a temple of Ranchhodji and is used for caste dinners. The repair and other charges are borne by the council of the potters' caste. In Ghi-Kánta is a lodge containing the cushion, *gádi*, of Miya Sáheb and styled Miya Sáheb's lodge. It is able to hold 100 persons and is used by Kanbis who bear the cost of the repair and other charges. Near Ghi-Kánta, about 1839, Seth Maganbhái Karamchand built a lodge at a cost of £800 (Rs. 8000). It is able to hold 10,000 persons, and is used for caste dinners by Jains or Shrávaks. The repair and other charges are borne by the Seth himself. Near Maganbhái's lodge, about 1829, the sweetmeat-makers, *Kandois*, at a cost of £500 (Rs. 5000) built a lodge able to hold 250 persons. It is used for caste dinners. The repair and other charges are met partly from the rent of rooms attached, and partly from the funds of the Kandois' union. Near Maganbhái's lodge, about 1829, the rice-pounders, Golás, at a cost of about £400 (Rs. 4000)

built a lodge able to hold 700 persons. It contains a Mahádev's temple and is used for caste dinners. The rent of the rooms attached meets in part the expenses which are borne by the caste. At the Pánkor *náka*, about 1867, the oil-pressers, Ghánchis, at a cost of £300 (Rs. 3000) built a lodge able to hold 800 persons. It is used for caste dinners, repair and other charges being met by the caste.

Daryápur Division.

At the Pánkor *náka*, about 1779, Brahmachári Rámánand, at a cost of £100 (Rs. 1000) built a lodge. It is a spacious enclosure able to hold 1000 persons, and has rooms round it which, yielding a yearly rent of £30 (Rs. 300), meet the repair and other charges. In the Tanksál *pol*, about 1857, the Umábhái lodge was built at a cost of £2000 (Rs. 20,000). Able to hold 2000 persons, the lodge[1] contains a Jain temple and is used for caste dinners. The repair and other charges are borne by the Seth himself. At Ghi-Kánta, about 1804, the Sámal Bechar lodge was built at a cost of £1000 (Rs. 10,000). Able to hold 500 persons, the lodge contains a Mahádev's temple and is used for caste dinners. The temple has a yearly Government cash allowance of £5 (Rs. 50) which meets the repair and other charges. In Dabgarváda, about 1854, the oilmen, Ghánchis, built a lodge able to hold 500 persons. It is used for caste dinners, the repair and other charges being borne by the caste. Near Katkiávád, about 1819, the Khatris, at a cost of £1000 (Rs. 10,000) built a lodge able to hold 200 persons. It contains a temple of Hingláj Máta and is used for caste dinners. The caste council bears the repair and other charges. At the Pinjára *náka*, about 1819, the Kanbis of the Bhada Bhavat *pol* built the Ranchhodji lodge, able to hold 500 persons. It is used for caste dinners, the repair and other charges being met from the rent. In Lunsáváda, about 1859, at a cost of £400 (Rs. 4000), the Kadiás built a lodge able to hold 500 persons. It is used for caste dinners; repairs and other charges are met from caste funds. In Hája patel's *pol* the Visa Shrimáli Shrávak Vániás, at a cost of £400 (Rs. 4000), built a lodge able to hold 1000 persons. It is used for caste dinners, the repair and other charges being met from caste funds. In Dhana Suthár's *pol*, about 1849, Seth Abhechand Pánáchand at a cost of £500 (Rs. 5000), built a lodge able to hold 500 persons. It is used for caste dinners. In Burhán Miya's *pol*, the Rávat caste, at a cost of £200 (Rs. 2000), built the Denkuva lodge able to hold 300 persons. It is used for caste dinners; the repair and other charges are met from the rent. Near the Bechardás dispensary an old woman Ambábái, about 1829, at a cost of £300 (Rs. 3000) built a lodge able to hold 100 persons. It contains a temple of Ranchhodji and is used for caste dinners. The repair and other charges are met from the rent. Near Chandan Talávdi one Bápuji Maháráj, at a cost of £300 (Rs. 3000) built the *Masruválás'* lodge. At present (1879) it belongs to the *Masruválás*, the weavers of Ahmedabad cotton and silk cloth, *masru*. Able to hold 400 persons the lodge is used for

1 It is where the old mint used to stand. On one side there is the Harkuvarbái's girls' school.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Caste Lodges.

caste dinners. Before 1876 only parched gram was given in charity. Since then an alms-house, *sadávart*, has been established offering every beggar who will cook and eat it within the enclosure, one day's food. The guild funds of this class at present (1879) amount to £1500 (Rs. 15,000). Formerly the yearly revenue amounted to £500 (Rs. 5000), but owing to declining trade it has fallen to £200 (Rs. 2000). In the Kálupur *chakla* is the *Gajániválás'* or silk weavers' lodge able to hold 200 persons. Parched gram costing £50 (Rs. 500) a year is distributed here daily. The expenses are met from a fee of 1½*d.* (1 *anna*) on each piece, *pát* or *táka* of silk, which in ordinary seasons yields £100 (Rs. 1000) a year; some years ago it amounted to £200 (Rs. 2000).

Khádiya Division.

In Galiárávád is a lodge built by the guild of the Ghánchis or oil-pressers. Able to hold 450 persons, the lodge contains a temple of Bechráji Máta, and is used for caste dinners. The repair and other charges are met out of the caste funds. Near the Haveli *pol* is a lodge built by the Vadnagara Nágar Bráhmans at a cost of £500 (Rs. 5000). Able to hold 500 persons, the lodge contains a temple of Mátáji and is used for caste dinners. The repair and other charges are met out of the caste funds. Near the Panchkuva gate is a lodge built by the guild of the *Tágiás*, or silk dealers. It is able to hold 2000 persons and has an alms-house, *sadávart*, attached to it. Every beggar is given a day's uncooked food with molasses, *gol*. But the same men do not get fed day after day. Besides this, 200 pounds of rice and pulse, *khichadi*, are daily cooked and distributed to the poor. Every beginner in this trade has to pay £50 (Rs. 500), and the guild fund at present (1879) amounts to about £4000 (Rs. 40,000). Near the Panchkuva gate, about 1849, the Kansárás or copper-smiths built a lodge able to hold 500 persons. It is used for caste dinners, the repair and other charges being met from the caste funds. Near the Panchkuva gate is a lodge built by the caste committee of the Khamárs, a class of weavers. It is able to hold 350 persons, has a temple of Bechráji Máta, and is used for caste dinners. The repair and other charges are borne by caste funds. Near the Panchkuva gate is a lodge built by the guild of the Kadia, or bricklayer, caste. It is able to hold 1200 persons, has a Mahádev's temple, and is used for caste dinners. The repair and other chargés are borne by caste funds. In Dolatkhána is a lodge built by Suthárs, or carpenters. It is able to hold 800 persons, has a Mahádev's temple, and is used for caste dinners. The repair and other charges are borne by the caste funds. Near the Panchkuva gate is a lodge built by Seth Mayábhái who bears the repair and other charges. It is able to hold 500 persons and is used for caste dinners. In Golvád is a lodge built by Seth Harivallabh Mulchand who bears the repair and other charges. It is able to hold 150 persons and is used for caste dinners. In Lákha Patel's *pol* is a lodge built by the caste of Desávál Vániás. It is able to hold 300 persons and is used for caste dinners. The repair and other charges are borne by the caste funds. Near the Panchkuva is a lodge built by the Khatri people. It is able to hold 100 persons, has a Mahádev's temple, and is used

for caste dinners. The repair and other charges are borne by the caste funds. In Ráypur is a lodge built by the ancestors of one Bajuráv. It is able to hold 150 persons, has a Mahádev's temple and is occasionally used for caste dinners. The repair and other charges are borne by the owner. In Ráypur is a lodge styled Dolatráy Mugutráy's lodge. It is able to hold 100 persons, has a Mahádev's temple and is used for caste dinners. The repair and other charges are borne by the owner. In Ráypur is a lodge built by a late Baroda minister Venirám and given over to his castemen the Audich Bráhmans. It is able to hold 150 persons. The repair and other charges are borne by the founder's family. In Sarkhivád is a lodge built by *Rangrej* or silk dyers of the Leva Kanbi class. It is able to hold 100 persons and is used for caste dinners. The repair and other charges are borne by the funds of the Rangrej union. At the Panchkuva gate is a lodge built by a timber dealer and carpenter, Gangárám. It is able to hold 100 persons, has a Mahádev's temple, and is used for caste dinners. The repair and other charges are borne by the owner. In the old Khádiya ward is a lodge built by one Harirám. It is able to hold 100 persons, has a Mahádev's temple, and is used for caste dinners. The repair and other charges are borne by the owner. Opposite to Amritlál's *pol* is a lodge built by a Visnagara Nágar Bráhman, Amritlál. It is able to hold 150 persons, has a temple of Mahádev, and is used for caste dinners. In Dolatkhána is a lodge built by the Darji or tailor caste. It is able to hold 150 persons and is used for caste dinners. The repair and other charges are borne by the caste funds. Near the Vad *pol* police station is a lodge built by one Munibáva. It is able to hold 150 persons, and is used for caste dinners. The repair and other charges are borne by the owner. In the Sárangpur *chakla* is a Tarvádi's lodge able to hold 200 persons. It is used for caste dinners. It has a temple of Mahádev visited by many people. The repair and other charges are borne by the owner. Near Ghásirám's *pol* is a lodge belonging to Khadáyta Vániás. It is able to hold 200 persons, and is used for caste dinners. The repair and other charges are borne by the caste funds. Near the Khádiya police station is a lodge belonging to the Sáthodra Nágar Bráhman caste. It is able to hold 400 persons, and is used for caste dinners. The repair and other charges are borne by the caste people.

Jamálpur Division.

At the Pánkor *náka* is a lodge styled Amu Miyá's lodge. It was built by an ancestor of a certain Jamádár Amu Miya Jámu Miya during the Maráṭha rule in Ahmedabad. It is able to hold 500 persons and is used by Musalmáns. Men from any of the Gujarát states also put up here. The repair and other charges are met from the rent of the outside rooms. In Kágdi lane is a lodge built about 1864, at a cost of £500 (Rs. 5000) by the Visa Shrimáli Shrávaks for the use of their own caste. It is able to hold 3000 persons and is used for caste meetings as well as caste dinners. The repair and other charges are met from the rent of the outside rooms. At Khámása's *chakla* is a lodge built, about 1864, at a cost of £1500 (Rs. 15,000) and styled the Dasa-Nágar-Meshri Vániás' lodge. The lodge is able to hold 1000 persons and is used for caste dinners by all Hindu castes.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Caste Lodges.
Jamálpur Division.

The repair and other charges are met from the rent of the outside rooms. At Khámása's *chakla* is another lodge built in 1849. Able to hold 400 persons, the lodge contains a Hanumán's temple and is used for Dhed caste dinners. The repair and other charges are borne by the Dhed caste funds. Along the Tájpur wall is a lodge built about 1779 and styled Lála Vajerám's lodge. It is able to hold 200 persons and is used for caste dinners. The repair and other charges are borne by a Báva of Chhabila Hanumán. Along the same wall is a Luhárs', or blacksmiths', lodge built about 1854. It is able to hold 200 persons, has a Mahádev's temple, and is used for caste dinners. The repair and other charges are borne by the caste funds. Outside the Tájpur Cháligara *pol* is a lodge built about 1819. Able to hold 500 persons, the lodge belongs to the Cháligara *pol* union, has a Hanumán's temple, and is used for caste dinners. The repair and other charges are borne by the *pol* funds. In Sálvis' *pol* is a lodge built about 1779 and able to hold 100 persons. It has a Mahádev's temple and is used for caste dinners. The repair and other charges are borne by the *pol* funds. Near the Gáikwár's *haveli*, or palace, is a lodge built about 1729 and styled Himatlál Malukchand's lodge. Able to hold 200 persons, the lodge contains a Mahádev's temple and is used for caste dinners. The repair and other charges are borne by the owner. Near the Ganesh gate is a very old lodge styled Dudhádhári's lodge. It is able to hold 400 persons, has a Mahádev's temple, and is used for caste dinners. Many Gosáis put up and live in the lodge. The Gosáis bear the repair and other charges. In the Mochi lane is a lodge built about 1839 and able to hold 300 persons. It is used for dinners of the Mochi or shoemaker caste. The repair and other charges are borne by the caste funds. Behind Sálvis' *pol* is Svámi Motipuri's lodge built about 1809. Able to hold 400 persons, this lodge contains a Mahádev's temple and is used for caste dinners. The repair and other charges are borne by a Gosái. In Dánápith is a lodge built about 1839 by the *Phadiás'*, or grain dealers' guild, who bear the repair and other charges. It is able to hold 250 persons and is used for caste dinners. In the Mándvi *pol* is a lodge built about 1779 and styled Joita Dhola's lodge. Able to hold 300 persons the lodge has a Mahádev's temple and is used for caste dinners. The repair and other charges are borne by the owner.

Temples and Churches.

Most of the chief places of worship have received separate notice. But as Ahmedabad is the head-quarters of the Gujarát Jain or Shrávak sect, some further details of their places of worship are given here. Besides an altar with images in the underground cellar, *bhoyra*, of every dwelling, the Jains have upwards of 120 temples. Of these, eighteen, besides Hatising's already described, from their size or other reasons, call for special notice. Of the eighteen, twelve are in the Daryápur, four in the Khádiya, and two in the Jamálpur division.

Jain Temples.
Daryápur Division.

Of the Daryápur temples, Shambhavnáth's in the Jawherivada *pol* of the same name, is one of the oldest and largest. Its date is not known, but it is said to have been built by the Jain community at a

cost of £10,000 (Rs. 1,00,000). Outside, the building is plain with no marked architectural features. Inside, there are three divisions, the *mandap* or porch, the assembly hall, *sabha mandap*, and the shrine, *nijmandir*, the floor of all laid with rich marble. From the *sabha mandap* a flight of steps leads to an underground temple of the same size as that above ground, and like it, divided into three parts, *mandap*, *sabha mandap*, and *nijmandir*. The ceiling is supported by pillars, and the floor is richly inlaid with marble. The objects of worship are three richly finished marble figures about twice the size of life. Jagvallabh Párasnáth's in Nisa *pol* in Jawheriváda is an old temple built at a cost of £7500 (Rs. 75,000) by a company of Jain pilgrims. It has two underground cellars, *bhoyra*. One of them contains a statue of Jagvallabh Párasnáth with two small statues, one on each side. Opposite to this is another room with a statue of A'desar Maháráj and smaller statues, one on each side. The old temple of A'desar Bhagván in Jawheriváda was rebuilt about 1859 by Seth Lallubhái Pánáchand at a cost of about £5000 (Rs. 50,000); it has a large underground cellar with three large statues. The interior is very richly finished with marble floors. The Chomakji temple in Chomakji *pol* in Jawheriváda was in 1866 (1922 S.) built by Seth Maganbhái Hakamchand at a cost of about £4500 (Rs. 45,000). The old temple of Chintáman, with an underground cellar, in Jawheriváda was built by the committee, *panch*, at a cost of about £2500 (Rs. 25,000). Another old temple of Chintáman Párasnáth in Jawheriváda was, about 1859, rebuilt by Seth Surajmal Vakhatsha at a cost of about £4000 (Rs. 40,000). The old temple of Ajitnáth in Jawheriváda was rebuilt by Seth Vakhatchand Khushálchand at a cost of about £4000 (Rs. 40,000). The old temple of Mahávir Svámi in Jawheriváda was burnt down. Another was, at a cost of about £4000 (Rs. 40,000), in 1849 (1905 S.), raised on the spot by Ráo Bahádur Premábhái Hemábhái. In Dosiváda *pol* is the Ashtápadji temple built in 1856 (1912 S.) by Seth Maganbhái Karamchand at a cost of £6500 (Rs. 65,000). Partly Jain partly Musalmán in style, the inside is paved with different coloured marbles, and in the shrine are fifty-three marble seats, fifty-two of them white with four figures each and the 53rd black with sixteen images. The temple of Mandir Svámi in Dosiváda *pol* was built by the Jain community of Osvál Vániás at a cost of £4000 (Rs. 40,000). The temple of Dharmnáth in the Tanksál *pol* was, in 1859 (1915 S.), built by Setháni Harkuvarbái at a cost of about £2000 (Rs. 20,000). The old temple of A'desar Bhagván in Dhana Suthár *pol* was built at a cost of about £3000 (Rs. 30,000) by Sada Somji. The cost of repairs is borne by the committee, *panch*.

Khádiya Division.

Mahávir Svámi's was an old temple in the Phatása *pol*. It was rebuilt by Seth Umábhái Rupchand in 1866 (1922 S.) at a cost of £5000 (Rs. 50,000). Except a row of Jain pillars in front and in the inner porch, *sabha mandap*, the temple is of no architectural interest. The old Hansnáthji's temple in Phatása *pol* was in 1862 (1918 S.) rebuilt by Setháni Harkuvarbái at a cost of £5000 (Rs. 50,000). The Jain community bears the cost of repairs. This temple is handsomely built with a dome, stone pillars, and marble floor. The

Chapter XIV.
Places of Interest.
AHMEDABAD.
Jain Temples.

old temple of Neminath in Chang *pol* was built by the Jain community at a cost of about £3000 (Rs. 30,000). The old temple of Shambhavnáth in Kálupur was built by the *panch* at a cost of about £7000 (Rs. 70,000). It has an underground cellar and a statue of Shambhavnáth and another of Chintámannáth.

Jamálpur Division.

The old temple of Godi Párasnáth in Tokarsha's *pol* was built by the *panch* at a cost of about £5000 (Rs. 50,000). The Samar Shikhar temple[1] in the Mándvi *pol* was built by Rupvijay Mahárāj at a cost of about £5000 (Rs. 50,000) raised by subscription.

Fairs.

Though, in and round the Ahmedabad city, there is no place esteemed holy enough to draw worshippers from any great distance, in addition to the Hindu pilgrimage of walking round the city every third year, twenty-four fairs are held, fifteen of them Hindu and nine Musalmán. All the Hindu and three of the Musalmán fairs last for one day, and of the rest none are held for more than five days. Except at the Sháh A'lam fair, where there is a very little trafficking, at none of these fairs does the trading go beyond the selling of flowers, fruit, sweetmeats, and toys.

City Wall Pilgrimage.

Next in merit to the world pilgrimage, *prithvi pradakshana*, comes the city pilgrimage, *nagar pradakshana*. Once in every three Hindu years, during the intercalary month, *Adhik* or *Purushottam más*, Hindu women, on some holy days, walk barefoot round the city, bathing and worshipping at seventeen[2] places, most of them on the left bank of the Sábarmati. In making this round, a woman starts early in the morning for Dáda Harir's well, and going by the north, west, south, and east, comes home through the same gate she left by. On coming into the city she visits some temples before going home. To do all this takes a full day, from ten to twelve hours. Any one doing the pilgrimage passes the day as a fast, does not sleep during the night, and next day does not break her fast till she has feasted some Bráhmans.[3]

---

[1] Of this temple the survey record of 1824 contains the following notice: Built about a century and a half ago, at a cost of £13,600 (Rs. 1,36,000) the temple is neat, pretty, and handsomely paved with marble. It gets its name, the *Samar Shikhar*, from a most elaborate carving of the fabled hill of Samara, sacred both among Jain and Bráhmanic Hindus; see Fergusson's Hist. of Arch. III. 231.

[2] Though they bathe at more places, the whole ceremony is known as the twelve baths, *bár áre náhávu*.

[3] The order of visiting and the rites to be performed at the different places of worship, are as follows: *Dáda Harir's well*, bathe, and worship Nilkanth Mahádev and A'chárji; *Camp*, bathe and worship Hanumán; *Khadgadháreshvar*, between the camp and Shahi Bág, bathe and worship the Khadgadháreshvar Mahádev; *Shahi Bág*, bathe and worship Bhimnáth Mahádev; *Náranghát* or *Pháto áro*, bathe and pray to the sun; *Dudheshvar*, bathe and worship Dadhichi Rishi Mahádev; *Chandrabhága*, bathe and pray to the Almighty; *Sháhápur*, bathe and pray to the Almighty; *Khánpur*, bathe and pray to the Almighty; *Bárádari*, bathe and pray to the Almighty; *Rám gate* or *Mahádevno áro*, bathe and worship Mahádev; *Dudhádhári Mahádev*, bathe and worship Mahádev; *Ráykhad*, bathe and pray to the Almighty; *Khán Jahán*, bathe and worship Mahádev; *Jamálpur*, bathe and worship Mahádev; *Sapta Rishi*, bathe and worship Mahádev; *Sháhávádi*, bathe and worship Mahádev. Here the pilgrim gives alms.

At Dudheshvar Kájipur, about a mile and a half north-west of the Delhi gate, on *Asád vad 30th* (July) is held the Divása fair attended by about 15,000 Hindus who bathe, worship Mahádev, and give alms.

Hindu Fairs.

Shilá Sátam or Táhádi Shil.

At the Sháhi Bág, or Pádsháhi Bádi, on *Shrávan vad 7th* (August) a Hindu fair is held, attended by about 12,000 people. The story of the origin of the fair is that, in the time of Vikram, a childless Vánia of Ujain, asking a Bráhman what he should do to get an heir, was told that, if he dug a large lake, the goddess Shitla would be pleased and grant his wish. The Vánia built a lake, but it remained dry. Asking another Bráhman, he was advised to win the goddess's favour by offering her a human sacrifice. Securing his victim the Vánia went to king Vikram and entreated him to offer the sacrifice. The king agreed, and on *Shrávan vad 6th* stood with the victim in the middle of the lake, and on the seventh slew him. As soon as the victim's blood fell on the ground, the lake filled with water, and the bodies of both king and victim disappeared. But before the day was over, the goddess came and carried them away in a car. Then the people, that had come to see the sacrifice, bathed in the lake, and going home, ate food cooked the day before. Like them the worshippers on this day, bathe with cold water and eat no freshly cooked food.

Gokal A'tham or Janma Ashtami.

At the Sháhi Bág, or Pádsháhi Bádi, on *Shrávan vad 8th* (August), in honour of Krishna's birthday, a Hindu fair is held, attended by about 10,000 people.[1]

Daro A'tham.

At the Sháhi Bág, on *Bhádarva sud 8th* (September), a Hindu fair is held attended by about 15,000 people. The story of this fair is that once a woman went with her daughter-in-law to cut grass in a field. The daughter-in-law said she would not cut bent, *daro*, grass and gathered a bundle of other kinds. On their way home they heard that their house was on fire. The daughter-in-law had left her child in the cradle, and rushing into the fire found it unharmed. So it came that on this day a fair is held and no bent grass is cut.

Nilkanth Mahádev.

The month of *Shrávan* (August) and especially its Mondays are sacred to Shiv. On the last day, *amás*, about 15,000 Hindus visit the Nilkanth Mahádev at Asárva about a mile north-east of the city.

A'chárji Mahárájj.

In Asárva, about a mile north-east of the city, is the seat, *gádi*, of A'chárji Mahárájj. Holding him to be an incarnation, *avtár*, of Krishna, on *Kártak sud 9th* (November), about 10,000 Hindus visit

---

1 The story of Krishna's birth is, that Kauns the ruler of Mathura, warned that his sister Devki's child would kill him, kept her and her husband Vasudev in confinement, and from time to time, by striking them against a stone, killed her children as they were born. In this way seven children were slain. The eighth, Krishna, born at midnight on *Shrávan vad 8th*, was at once taken to Gokal and made over to its ruler, Nand. In return a daughter, born in the Nand family, was brought to Mathura and laid beside Krishna's mother. The next day, Kauns, hearing of the birth, got the child, and, as he slew her, her spirit, disappearing in a lightning flash, cried 'Your enemy is alive in Gokal and will kill you.'

Chapter XIV. Places of Interest.

the place, where, in front of the shrine, are arranged a variety of dishes.

AHMEDABAD. Hindu Fairs.

In the Gomtipur suburb, a mile south-east of the Sárangpur gate, on the trading new year's day, *Kártak sud 1st* (November), about 20,000 Hindus visit the temple of Narsinh.

Dasera.

At the Kánkariya lake outside the A'stodiya gate, on *A'so sud 10th* (October), is the Dasera fair attended by about 15,000 men, Hindus of all classes. Among them the Dakshani Bráhmans and Maráthás worship the *shami* tree.

Sukhráy Mahádev.

On the second Monday in *Shrávan* (August) about 5000 Hindus visit Sukhráy Mahádev at Vastrál, a village about four miles south-east of the city.

Shháváadi Mahádev.

A week later, on the third Monday in *Shrávan* (August), about the same number (5000) of Hindus visit the Mahádev at Shháváadi, a village about two and a half miles south-west of the Jamálpur gate.

Rishi Panchmi.

Outside the Jamálpur gate, on *Bhádarva sud 5th* (August), a fair is held at the Seven Saints' Landing, *Sapta Rishi no A'ro*, on the left bank of the Sábarmati. It is attended by about 5000 Hindus. The story of the fair is that some one performing ceremonies in honour of the dead, asked some Bráhmans to dine at his house. The woman of the house, while cooking, found herself ceremonially unclean, but fearing that the food would be thrown away, told no one. The Bráhmans dined and left. But her guilty conscience gave the woman no rest, and she went to a saint, *Rishi*, who told her to keep this *Bhádarva sud 5th* holy, and on it to eat nothing grown by ox-labour.

Sidháchalpat.

Outside the Jamálpur gate on *Kártak sud 15th* (November) a Shrávak fair is attended by about 10,000 people. This is the last day of the rainy, *chomásu*, season and the Shrávaks are now free to go on tours and pilgrimages. A map of the temple and Sidháchal hill at Pálitána is hung up and for Shrávaks, who cannot leave Ahmedabad, the sight of the map is as good as the sight of Pálitána itself.

Dev-uthi-agiáras.

On the river banks, from early morning to about 11 A.M. on *Kártak sud 11th* (November) at the end of the rainy season, the Dev-uthi-agiáras fair, in honour of the gods' return after their four months' rest in the lower world, is attended by about 20,000 Hindus. After this marriages, that have been stopped during the four rainy months, can again be held.

Rath Játra or Car Fair.

At the Jamálpur gate, on *Asád sud 2nd* (July), about 2000 Hindus join in dragging the Jagannáth car. The practice was introduced in 1869 by a certain Hanmándás Báva from Jagannáth.

Rámnavmi.

Within the city at the Svámi Náráyan temple in Daryápur, on *Chaitar sud 9th* (April), the Rámnavmi fair in honour of Rám's birthday, is attended by about 10,000 Hindus.

Musalmán Fairs.

Dáudi Bohorás' Tomb.

Within the limits of Asárva about a mile north-east of the city, in honour of Kutb-ud-din, a Head Mulla of the Shia Bohorás, who died in 1635 (1046 H.), on the *27th Jamádi-ul-ákhar*, a Musalmán fair, *uras*, is attended by about 5000 people including many Bohorás

from distant villages. The fair lasts for three days and some petty trading goes on.

Malik Shábán.

At the village of Rakhiál about 1¼ miles east of the Sárangpur gate, on the *2nd Jamádi-ul-awwal* a Musalmán fair, *uras*, is attended by about 500 people. The fair is in honour of Malik Sharaf, a slave of Sultán Muhammad son of Sultán Ahmad I., who was minister, *vazir*, to Sultán Kutb-ud-din, and styled Malik Shábán. Giving up his office he devoted himself to a religious life and died at his estate in the village of Rakhiál in 1465 (870 H.).

Sháh A'lam.

About a mile and a half outside the Jamálpur gate, at the village of Dánilimbda, on the *20th Jamádi-ul-ákhar*, in honour of Sháh A'lam, a Musalmán fair, *uras*, is attended by about 50,000 people from Bombay, Surat, Cambay, and Káthiáwár, as well as from the Ahmedabad district. It is one of the largest of the city fairs and lasts for five days. A few Hindus attend and some small trade is carried on.

Pirána.

Details of the Pirána fairs are given above at page 288.

Shaikh Ahmad Khattu or Ganj Bakhsh.

At Sarkhej, on the *14th Shawwál* and two following days, a Musalmán fair, *uras*, in honour of Shaikh Ahmad Khattu or Ganj Bakhsh, who died in 1445 (850 H.), is attended by about 4000 people.

Bába A'li Sher.

At Sarkhej, on the *10th Jamádi-ul-awwal* and two following days, another Musalmán fair, *uras*, in honour of Bába A'li Sher, a saint, *wali*, noted for his practice of wearing no clothes,[1] who died in 1445 (850 H.) is attended by about 1000 people.

Pirmad Sháh.

In the Sháhápur division near the civil hospital, on the *27th Jamádi-ul-awwal* and two following days, a Musalmán fair, in honour of Pirmad Sháh, is attended by about 3000 people. The saint who died in 1749 (1163 H.), lies buried in a tomb near the *Patharkuva* or stone-well in this division. Many Sunni Bohorás and other Musalmáns attend.

Muharram.

At the Khánpur gate in the west city-wall on the *10th Muharram* is held the greatest Musalmán gathering, the Muharram fair. It lasts for one day, and almost the whole city, as well as people from outside villages attend. Though with less show and on a smaller scale than in Surat, the practice of carrying *táziás*, or imitations of the tomb of Imám Husain the grandson of the Prophet who was slain at Karbala in 672 (50 H.), is on the *10th Muharram* kept up at Ahmedabad. With the Shiás this is a season of mourning. But many of the lower classes of Sunnis make it a time of merriment, appearing for amusement or profit as tigers, bears, and in other guises. During the greater part of the day, from 12 to 5 P.M., bands of people carrying *táziás*, pass out of the Khánpur gate and, leaving them by the river side, return home.

Sultán Ahmad.

In the Mánekchok on the *4th Rabi-ul-ákhar* a Musalmán fair, *uras*, in honour of Sultán Ahmad I. the founder of Ahmedabad, is attended by about 4000 people.

[1] This is doubtful; see page 249, foot-note 5.

Chapter XIV.

Places of Interest.

AHMEDABAD.

Trade, 1868-1877.

Section IV.—Trade and Manufactures.

A general account of the trade of Ahmedabad, in its time of prosperity (1411-1720), of depression (1720-1817), and of revival, has been given in the history of the city, and in the chapter on trade. Up to 1868 no details are available to illustrate the history of the trade of the city under British rule. Since 1868, as will be seen from the following tables, the total traffic by rail has in goods risen from 51,691 tons in 1868 to 82,314 in 1877, and in passengers from 273,676 to 504,786:

Ahmedabad Station Railway Traffic, 1868-1877.

YEAR.	PASSENGERS.			GOODS.		
	Outward.	Inward.	Total.	Outward.	Inward.	Total.
1868	137,628	136,048	273,676	20,347	31,344	51,691
1869	140,609	139,261	279,870	14,608	48,396	63,004
1870	179,502	179,453	358,955	27,000	56,611	83,611
1871	177,687	179,359	357,046	20,911	42,468	63,379
1872	231,169	234,876	466,045	21,628	37,802	59,430
1873	235,158	240,671	475,829	22,599	34,663	57,262
1874	236,189	241,214	477,403	25,281	35,689	60,970
1875	232,744	236,850	469,594	30,887	39,632	70,519
1876	251,927	251,578	503,505	29,369	43,939	73,308
1877	250,598	254,188	504,786	30,808	51,506	82,314

The following statement shows for the ten years ending 1877 the chief changes in exports and imports:

Ahmedabad Goods Traffic in Tons by Rail, 1868, 1873, 1877.

ARTICLES.	1868.		1873.		1877.	
	Outward.	Inward.	Outward.	Inward	Outward.	Inward.
Cotton, full pressed	10,126	76	15	372	219	142
Do. half pressed			1321	...	421	277
Fruit	296	2240	1132	2086	1613	2263
Grain and seeds	3624	5603	11,116	1771	19,353	11,743
Mahuda, Bassia latifolia	2207	27	1575	...	660	28
Metal	170	2319	323	1434	443	3359
Oil	56	50	114	96	718	155
Opium	150	...	940	...	784	...
Piece goods, Country	445	2006	690	2030	961	2161
Do. Europe				686		364
Salt	6	...	393	3408	3	6165
Sugar and molasses	14	9268	409	10,653	479	6568
Timber	31	3281	350	2870	822	4887
Tobacco	2	157	26	373	34	328
Twist, Country	22	374	173	256	78	247
Do. Europe						42
Wool	979	3	399	8	443	1
Sundries	2219	5940	3623	8620	3777	12,776
Total ..	20,347	31,344	22,599	34,663	30,808	51,506

Of the main items of trade, cotton exports have fallen from 10,126 tons in 1868, to 1336 in 1873, and to 640 in 1877. On the other hand, cotton imports have risen from 76 tons in 1868, to 372 in 1873, and 419 in 1877. This change is probably due to increased consumption in the Ahmedabad mills. Under grain and seeds there is a considerable rise, in imports from 5603 tons in 1868 to 11,743 in 1877, and in exports from 3624 tons to 19,353. Little *mahuda*, Bassia latifolia, is imported; the exports show a fall from 2207 tons in 1868, to 1575 in 1873, and 660 in 1877. Opium exports rose from 150

tons in 1868 to 940 in 1873; in 1877 the export fell to 784 tons. The opening of a railway to the Government salt works at Khárághoda (1873) has led to a large salt traffic by rail to Ahmedabad. The quantity carried rose to 3408 tons in 1873, and 6165 tons in 1877. The arrangements for station stores and uniform rates of carriage, have stopped the former small (393 tons in 1873) salt export from Ahmedabad. The export of wool fell from 979 tons in 1868 to 399 in 1873; in 1877 it again rose to 443 tons.

Manufactures.

The manufacturing prosperity of Ahmedabad hangs, as of old, on three threads, cotton, silk, and gold. The hand spinning of cotton thread, and the weaving of coarse cotton cloth, have from the competition of steam greatly declined. But these industries have not been lost to Ahmedabad. Within the past twenty years four steam factories, for spinning and weaving, have been opened and continue to prosper, giving employment to about 2000 workmen. The produce of these and of the Bombay mills has interfered much with the hand-loom weaving of coarse cloth, and European competition has lowered the value of the finer classes of goods. At the same time the local mills supply cheap yarn to the weavers of fine cloth, and for the finer sorts of hand woven goods there is still a fair demand. Chiefly in the Jamálpur division of the city, calico-printing employs a large number of Musalmáns and Hindus, who, in spite of their rude tools and materials, turn out wonderfully beautiful work. A large quantity of prints goes to Siám and exports are made to various other places. Some account of the new steam print work has been given above (p.133) under the head 'Manufactures.' All the processes in the manufacture of silk and gold thread are carried on in the city. The raw silk comes through Bombay from China, Bengal, Bussorah, and Bukhára, the yearly supply being about 200,000 pounds of silk valued at about £150,000 (Rs. 15,00,000). As already noticed (p.135) the returns of the last two seasons show a serious falling off. Bukhára silk has but lately been introduced into the Ahmedabad market, and the quantity imported is small. It comes ready for weaving and is used only for the woof. Of both the white and yellow varieties of China silk, the consumption is large. Bussorah silk comes in a raw state; the best is valued at from 36*s.* to 38*s.* (Rs. 18-Rs. 19) a pound. Bengal silk, both as regards the demand for it and the price it fetches, holds almost the same position as Bussorah silk. The manufactured goods find a market in Bombay, Káthiáwár, Rajputána, Central India, Nágpur, and the Nizám's dominions. The making of gold and silver thread, used in the richer varieties of silk-cloth and brocade, supports many families. The richer Ahmedabad silks and brocades are, both in texture and colour, considered more lasting than those of Benares. Of metal workers there are many goldsmiths, braziers, and blacksmiths, who have generally full employment and are in good circumstances. Of ornaments, Ahmedabad silver anklets, *kallás*, are held in high esteem over all Gujarát and Káthiáwár, and in Bombay. The modern open brass screens in Hatising's temple and in the Sháh A'lam tomb, show that the Ahmedabad copper and brass smiths have not lost their old skill as metal-workers. There are about 175 Hindu families, most of them

Chapter XIV.
Places of Interest.
AHMEDÁBAD.
Manufactures.

Kansárás or coppersmiths, the rest Luhárs or blacksmiths. The raw material, copper and zinc, is brought in sheets from Bombay by metal dealers, chiefly Musalmáns of the Dáudi Bohora sect, and is sold by them to the smiths. Most of the brass is made in Ahmedabad in the proportion of one part of copper to three of zinc. Cooking and water pots, jewel and spice boxes, and rings are made either of copper or brass. Lamps, images, chains, bells, gongs, bracelets and anklets, stands, and betel-leaf cases, *pándániás*, are made only of brass. Among these, the only article for which Ahmedabad is specially famous, is its betel-leaf boxes of well designed, very finely carved brass-work. The wood and stone carvers, of whose skill Ahmedabad has so many beautiful proofs, are now in poor condition, finding little demand for their work. Ahmedabad pottery is much better than that of most places in western India. Except a few Musalmáns, the potters are Hindus. Besides tiles and bricks, pots, toys, and grain jars are made in large quantities, and ornamented with red ochre and a white earth called *khadi*. Paper, for which Ahmedabad was once famous, is still made by Musalmáns. But except for vernacular Government registers and for native account books, the demand has greatly fallen off. A steam paper mill, that had for some time been at work, was destroyed by the 1875 flood. The machinery was saved and set up in the Sháhi Bág, but it was found not to pay and has since been closed. The Ahmedabad leather workers are well employed. Their decorated *nilgái* shields, and their cloth and leather women's shoes, are among the most popular articles of Ahmedabad make.

Section V.—City Management.

Public Offices.

The chief public offices are, within the Bhadar, the Collector's offices, except the treasury which, since 1870, has been handed over to the charge of the Branch Bank of Bombay in the old Dutch factory (p. 272), the Ahmedabad registry office, the city police inspector's office, and the magisterial lock-up; the Executive Engineer's office; the small cause and sub-judge's courts; the názar's office; and in Sidi Syed's mosque (p. 276), the Daskroi mámlatdár's *kacheri*. Outside the Bhadar, in the north-west, is the city survey office, and in the north-east, in Khánpur, are the courts [1] of the District Judge and his assistant, and further north in Mirzápur, the offices of the Executive Engineer for irrigation and the Deputy Surgeon General. Beyond the Delhi gate in the Sháhi Bág is the Police Superintendent's office. To the south of the Bhadar gate, along the east wall is the city criminal jail (p. 274). East of the jail is the post office, and further south-east the municipal and telegraph offices. The arsenal is in the

[1] The *Adálat* or old court-house (p. 277) was in 1859-60 condemned as unsafe and pulled down. The courts of the District Judge and his assistant, and of the principal sadar amin and munsif, with the exception of the názar's office, were removed to the Sháhi Bág. But this proved to be too far away and in 1862 the courts were brought back to the city, and have since been held in hired buildings, the Judge's and his assistant's in a residence in Khánpur just outside the Bhadar, and the sub-judge's in a wing of the small cause court-house inside the Bhadar. The offices of principal sadar amin and munsif have been abolished. The názar holds his office in the rooms in the gateway at the Bhadar gate or according to the old survey papers the *Piram Pir Darváza*.

Gáikwár's palace (p. 277), and to its east the civil debtors' jail in Sidi Salim's palace (pp. 319, 327). On the west about two miles is the Dhuliákot criminal jail (p. 199).

Education, 1878.

Besides private, and one Anglo-vernacular and four vernacular (two for boys and two for girls), or in all five grant-in-aid-schools with 720 pupils, and three Anglo-vernacular, ten Gujaráti (nine for boys and one for girls), three Urdu, and four night schools, or in all twenty Government schools with a total of 2422 pupils on the rolls, the city of Ahmedabad has, of Government educational institutions, a college, a high school, and two training colleges, one for men and the other for women; and of grant-in-aid institutions, one mission high school.

Gujarát College.

In 1861 to meet the demand for higher education in north Gujarát, a law lectureship was, under the supervision of the head master of the high school, founded in Ahmedabad and to suit the convenience of high school students, Government servants, and others, morning and evening classes were held. Afterwards English literature and Sanskrit, logic, mathematics, and science lectureships were added. But the classes were poorly attended, and after being continued for thirteen years, were closed in 1873. One cause of this failure probably lay in the fact that the lectureships were unconnected with the University course. This mistake has lately been corrected, and with the view of saving matriculated students the expense of reading for their First Arts examination at Bombay or Poona, a college has been opened in Ahmedabad to teach English, a classical language, history, logic, mathematics, and science, up to the standard of the First Arts examination of the Bombay University. This scheme was sanctioned in April 1879, and classes were at once formed under a staff consisting of a European Professor, who is also Head Master of the high school, and two native Professors.

Ahmedabad High School.

The Ahmedabad high school was established in 1846 as an English school. With buildings of its own, it has now (1878) on the rolls 185 students against 99 in 1851. Since 1868 eighty-seven of its pupils have passed their matriculation examination. Like all high schools it teaches English, Sanskrit, history, mathematics, and science up to the matriculation standard of the Bombay University.

Training Colleges. For Men.

The Gujarát training college was established in 1857 at the expense of Government. Thirty-three, the number of pupils on the roll in the beginning, had in December 1878 risen to seventy-two. The number of scholars, all of whom board at the college, depends on the departmental demand, no more than the number required being admitted. The college has a building of its own erected in 1867-68 (p. 325).

For Women.

The female training college at Ahmedabad was established in 1871 at the cost of Government, the municipality paying a monthly contribution for its support of £5 (Rs. 50), and local funds, one of £33 (Rs. 330). It has a building of its own erected in 1875 (p. 325). The number of scholars has risen from eight in the beginning to seventeen in 1879. The institution is under a European

Chapter XIV.
Places of Interest.

AHMEDABAD.

Education.

Lady Superintendent. It has hitherto provided nineteen teachers to girls' schools in the city and district. There are (1879) six resident students under the charge of a matron. Being of different castes, they arrange for their own food and cooking. To this institution is attached a practising school supported by local funds, in which there are (1879) 112 pupils. The more advanced of them learn along with the normal scholars in the training college.

Mission High School.

The Irish Presbyterian Mision high school was opened in 1866 at the cost of the Presbyterian church in Ireland, the contributions amounting to £114 (Rs. 1140). In the beginning there were thirty-four pupils; there are now (1879) 201. It has a building of its own (p. 325). The only resident students are six Christian lads whose parents are members of the Christian community at Sháhávádi. This school teaches up to the matriculation standard.

Tálukdári School.

In 1868 a Tálukdári school was opened for the sons of Tálukdárs with contributions amounting, in the beginning, to £240 (Rs. 2400). The number of pupils was fourteen in 1868 and varied between seventeen in 1869 and ten in 1878. The boys lived in a rented building, each in a separate room with his own servant. The master supervised the charges of their food, and their allowance was fixed according to their position. The expenses were defrayed from this allowance under the supervision of the master, subject to the control of the Tálukdári Settlement Officer. Not proving a success, the school was closed in 1878. It is again to be opened in connection with the Ahmedabad high school, the boys boarding in a house under the charge of one of the high school assistant masters, and attending such schools in the city as are suited to their age and knowledge.

Gujarát Vernacular Society.

The Gujarát Vernacular Society was established at Ahmedabad in 1848 by the late Mr. A. K. Forbes for the encouragement of vernacular literature and education, and for the collection of manuscripts and printed books. The society had in 1877 a fund of £2791 (Rs. 27,910), of which £1000 (Rs. 10,000) were contributed by Mr. Premchand Ráychand of Bombay. The first newspaper in Gujarát was started in Ahmedabad by this society under the personal supervision of Mr. Forbes. It was a weekly paper issued on Wednesday, *Budhvár*, and hence in Ahmedabad all newspapers are still called *Budhváriya*. The library, now included in the Hemábhái Institute, and the first girls' school in Ahmedabad, were established by the help of this society. Useful books were printed by it, and the publication of others was helped by money grants. It brings out a monthly magazine, the "Buddhi Prakásh" or Light of Knowledge, which in 1876 had a monthly sale of 1250 copies. The society helps libraries in all parts of Gujarát and Káthiáwár, and gives prizes to schools. It undertakes to sell and distribute good books, and offers annual prizes for essays on various useful subjects.[1] Its library

[1] A yearly prize of £15 (Rs. 150) is given for the best Gujaráti essay on a given subject, the funds coming from an endowment of £250 (Rs. 2500) given in 1864 by a Bombay merchant, Mr. Sorábji Jamsedji Jijibhái. Society's Annual Report for 1876, July 14th, 1877.

contained (1877) 1590 volumes in various languages. At the close of 1876 there were forty-eight life members, two yearly members, and two honorary members.[1] Its yearly receipts amount to about £180 (Rs. 1800) and its expenditure to £129 (Rs. 1290).

There are two libraries in the city, the Hemábhái near Káranj, and the A'páráv in Khádiya. The chief library is in the "Hemábhái Institute," built in 1858 by the Nagar Seth Hemábhái Vakhatchand, who gave £700 (Rs. 7000). Besides subscribing to a number of periodicals and newspapers, the library[2] contains a total collection of 4227 volumes. Its receipts were in 1878, £79 (Rs. 790), and its expenditure £87 (Rs. 870). The upstairs hall of the Institute is used for public lectures and meetings. The "A'páráv Library" started in 1870, has no building of its own. It contains 1690 volumes.[3] There is besides, a reading room in Sháhápur, established in 1876. It has seventy-seven members, and a collection of 600 volumes, 100 of them English and 500 Gujaráti; and subscribes to five Gujaráti magazines and eight Gujaráti newspapers.

Newspapers.

Three weekly newspapers[4] are published at Ahmedabad, an Anglo-Gujaráti, the "Hitechhu" or Well Wisher that has been in circulation for seven years; and two Gujaráti, the "Samsher Bahádur" of twenty-four, and the "Ahmedabad Samáchár" of nineteen years' standing. Of the Hitechhu 450, of the Samsher Bahádur 200, and of the Samáchár, sixty copies are in circulation.

Municipality.

For about fifty years Ahmedabad has had a revenue available for municipal purposes. First levied about 1830 for the repair of the town walls, the fund continued to be called the town wall fund, till, in 1858, a municipality was established, and in 1872 was constituted a city municipality. Besides two square miles within the city walls,

---

1 Life members subscribe £5 (Rs. 50) or upwards; the yearly subscription is 10*s.* (Rs. 5).

2 The subscribers number 20 life members and 39 first, 86 second, and 31 third class members, or in all 176, the subscription rates for the three classes being £1 (Rs. 10), 6*s.* (Rs. 3), 2*s.* (Re. 1) yearly, or 2*s.* (Re. 1), 9*d.* (*as.* 6), and 3*d.* (*as.* 2) monthly. A donation of £10 (Rs. 100) and upwards makes the giver a life member. At the close of 1876 there were 4137 volumes, 3747 of them English and 390 vernacular. The library subscribed to eight English, three Anglo-Gujaráti, two Anglo-Maráthi, and five Gujaráti newspapers; four of them dailies and fourteen weeklies. It also took in seven English and five Gujaráti magazines.

3 The subscribers number 2 life members and 59 first, 57 second, and 177 third class members, or in all 295. The subscription for a life member is £5 (Rs. 50) and upwards; for a first class member, 4*s.* (Rs. 2); and for a second class member, 1*s.* 6*d.* (*as.* 12) a year. Third class members are admitted free of charge, to read newspapers only. The receipts amount to £40 (Rs. 400) and the expenses to £36 (Rs. 360). At the close of 1876 there were 1325 volumes, 720 of them English and 605 vernacular. There were 438 magazines, 171 English and 267 Gujaráti. Of the 720 English books, 13 were on religion, 9 on law, 27 on science, 16 on geography and travels, 163 on history and biography, 466 on poetry and general literature, 18 on philosophy, and 8 on oriental literature. Of the 605 vernacular books, 21 were in Sanskrit, 40 in Maráthi, and 544 in Gujaráti. Of newspapers, the library subscribed to two English dailies, three English weeklies, and one English pamphlet; one Gujaráti daily, three Gujaráti weeklies, and two Gujaráti pamphlets.

4 'In Ahmedabad, as in most large cities of Hindustán, there were formerly newswriters who at midnight recorded all the transactions of the preceding day, and despatched their journals to their different correspondents, but this trade, owing to the great political revolutions in India, is fast declining, and is here altogether extinguished' (1817). Hamilton, Desc. of Hin. I. 696.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Municipality.

Saraspur a town of about fifty-two acres, and fifty-five acres of the Railway Suburb in the east, are included in municipal limits. For municipal purposes the city is distributed among four divisions, Sháhápur in the north-west, Daryápur in the north-east, Khádiya in the south-east, and Jamálpur in the south-west. Outside of the walls, Saraspur and the Railway Suburb form distinct divisions. Each of the city divisions has a municipal inspector, the Khádiya charge including the Railway Suburb, and the Daryápur charge including Saraspur. In 1878 the municipal receipts amounted to £22,545 (Rs. 2,25,450), and the charges to £26,798 (Rs. 2,67,980). The incidence of taxation was 3*s.* 10¼*d.* (Rs. 1-14-10) per head of the population.

Balance Sheet, 1878.

The following tabular statement, exclusive of balances, advances, and deposits, shows the chief heads of receipts and disbursements in the year 1877-78:

Ahmedabad Municipality Balance Sheet,[1] *1877-78.*

Receipts.	£.	Disbursements.	£.
Spirituous liquors	706	Establishment	1987
Octroi dues	11,483	Road-sweeping charges	1966
Tolls and wheel tax	2654	Scavenging	3603
Scavenging cess	3949	Fire	486
City survey	753	Water	2340
Railway suburb	734	Light	2170
Land sales	586	Gardens and trees	300
Shop rents	283	Water works	1217
Fines	334	Public works { New	6599
Miscellaneous	863	Public works { Repairs	2015
		Police	860
		Medicine	444
		Instruction	706
		City survey	1270
		Miscellaneous	835
Total	22,545	Total	26,798

Since its establishment (1858) the Ahmedabad municipality has spent, besides £41,290 (Rs. 4,12,900) on roads[2] and bridges, £11,037 (Rs. 1,10,370) on water works; £3120 (Rs. 31,200) on additions to the city gates and walls; £2867 (Rs. 28,670) on hospitals and dispensaries; and £1865 (Rs. 18,650) on sanitation.[3]

Roads.

The chief streets run north and south. Most of those passing east and west are broken and do not stretch across the town. The Oliphant road, forty feet broad, with side foot-paths and drains,

1 Exclusive of £5000 (Rs. 50,000) written off on account of the Ellis Bridge.

2 Of the roads, the six chief are, the Oliphant road costing £13,700 (Rs. 1,37,000); the Sárangpur to Kálupur road costing £4125 (Rs. 41,250); the Jordan road costing £2110 (Rs. 21,100); the Mirzápur road costing £2050 (Rs. 20,500); the Panchkuva to Chang *pol* road costing £1691 (Rs. 16,910); and the Khás Bazár road costing £1479 (Rs. 14,790).

3 Of minor works there are, the public gardens, £1012 (Rs. 10,120); the municipal offices, £1007 (Rs. 10,070); the vegetable market, £454 (Rs. 4540); the police stations, £266 (Rs. 2660); the clock tower, £243 (Rs. 2430); and the step-well in the Railway Suburb, £225 (Rs. 2250)

AHMEDABAD.
Municipality.
Roads.

and built at a cost of £13,700 (Rs. 1,37,000) runs from the Mánek gate in the south-west to the A'stodiya gate in the south-east. It does not pass through the thickly peopled parts of the city, but rows of houses are gradually rising on either side of it. No materials are available for stone-metalling the Ahmedabad streets. Of fifty miles of thoroughfare, including city lanes, only twenty-eight are fit for wheeled carriages. Of these, twenty miles are laid with limestone from the river bed and with metal. The streets are kept clean. At a monthly cost of £200 (Rs. 2000) about twenty-two miles of them are watered twice a day. The watering is done partly by forty-three water carriers, *bhistis*, and forty-five carts, and partly by the bucket splashing of 193 Vághris from roadside channels. At a monthly cost of £150 (Rs. 1500) the streets are well lighted by 1420 kerosine lamps. There are eleven fire engines.[1]

Drainage.

The highest point in the city is roughly about thirty feet above the river. Through four deepened water-courses drains run west and north into the river. But the south-east corner, cut from the river by a ridge, stretching from near the A'stodiya gate on the south to the Kálupur gate on the east, drains east into a channel dug outside of the walls.

Floods.

Ahmedabad has not often suffered from floods. Opposite the city, the river, with a bed about 1550 feet wide, flows during the fair season with a channel of only 375 feet, and leaves between the stream and the city a broad stretch of deep sand rising in mounds in front of the walls. Towards the south-west corner, the stream crosses to the left bank, and flows close under the city. The chief risk of flooding is from the river bend about 1½ miles north of the city. But this in ordinary years is guarded by the strong wall built along the left bank of the river at the Sháhi Bág. In 1714 and 1739 the Sábarmati flooded the city, and in 1755 the rain was so heavy that great breaches were made in the city wall. In 1813 the river is said to have risen eighteen feet above summer level. In 1868 there was scarcely any rain till August 10th and then in four days twenty-seven inches fell. There was no flooding from the river. But the local drainage, together with a very strong wind, destroyed 9566 houses worth £95,116 (Rs. 9,51,160), and movable property assessed at £5607 (Rs. 56,070). In 1875 on the evening of the 21st September, the gauge opposite the city showed the water five feet above the ordinary flood level. From that it continued to rise for two days till it stood five feet higher than in 1868, or about nineteen feet above the river's ordinary level. The two bridges, the railway bridge about three miles above the city, and the Ellis bridge in the south-west, were swept away. The flood waters forced their way through several of the city gates, made many breaches in the city walls, and covered more than a third of the town, causing twelve deaths, ruining 3887 houses worth £58,208 (Rs. 5,82,080), and destroying property valued at £16,459 (Rs. 1,64,590). This 1875 flood was the highest known at Ahmedabad and lasted for three days.

Water.

The average rainfall during the fourteen years ending 1874 was 29·36 inches; the highest fall in any one year being 46·43 inches in

[1] Details of the two last (1877) great Ahmedabad fires are given at page 262.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Municipality.
Water.

1868, and the lowest, 16·85 inches in 1861. In 1877 the rainfall was 21·65 and in 1878, 47·89 inches. Besides doing much to clean and sweeten the surface soil of the city, this supply of water is made use of to fill cement-lined cisterns, which, fed from the roofs by cement channels or iron pipes, are to be found in almost all the courtyards of the better class of houses, and form the principal source of the townspeople's drinking water. The other chief source of drinking water is the river. This, besides being used by the crowds of people that daily pass to wash and draw water, has for the last thirty years, at the south-west corner of the city, been pumped into a fifty-two feet high tower, filtered through vegetable charcoal and gravel, and, by a masonry guarded eight-inch earthen pipe, been brought into the heart of the city, and there distributed from seventeen iron stand-pipes and ten masonry reservoirs. This source of supply is unsatisfactory. It is too small in amount yielding not more than one gallon a day to each of the people, and even after filtering it is impure, the river getting soiled as it passes the cantonment and great part of the city.[1] The water of most wells within city limits has, partly at least from the want of any plan for freeing the city of its sewage, become so brackish and impure as to be unfit to drink or to give to plants, and is only used for watering the roads.[2] Outside the town walls are several wells brackish and not very pure, but used by some of the poorer classes. There is finally the great Kánkariya lake (p. 17) in the south-east of the town, which, under the scheme now in progress to fill it from the Khári river, will furnish a valuable supply of drinking water to the people of the south-east quarter of the town.

Conservancy.

The conservancy staff is eight inspectors, twelve foremen, and 644 sweepers, 509 for privies, and 135 for roads. The streets are well swept and provided with 125 dust-bins, and 275 places have also been set apart for house-owners to bring refuse to. Besides twenty-four public necessaries, fourteen of them inside and ten outside of the city, there are altogether 7674 privies, 2526 belonging to *pols*, and 5148 private.[3] Besides the privies, four fields, one each outside of the Sháhápur, Daryápur, and Jamálpur gates, and the fourth in the Saraspur suburb, have been set apart for necessary purposes. The refuse, brought in baskets by sweepers

[1] The water was at first drawn by Persian wheels. In their place two steam pumps, one of six and the other of five horse-power, were put up in 1866, at a cost of £1660 (Rs. 16,600). As the river is much disturbed during the day, the pumps are worked only at night.

[2] Some account of the few fresh wells near the city walls is given at pages 322, 325.

[3] Mr. Hewlett, Acting Sanitary Commissioner, adds these details : the public privies enclosed by a stone wall are paved and seated, the sweeper sprinkles wood ashes among the night-soil, and carries it off by a back passage ; the liquid flows into cesspools and is carted away ; except that they are usually unpaved the arrangement at the *pol* privies is much the same ; the night-soil of the private privies, which are generally placed in a corner of the verandah on the ground floor of the house, is cleared out by a sweeper through a small trap door. The liquid flows first into a catch pit, *kundi*, where, after straining, it passes into a black well, *khálkuva*, or cesspool, round, brick-built, about three feet across, and from twenty to twenty-five feet deep, arched over from two to five feet below the surface. In the rains the cesspools are closed and the water let flow on the street. These cesspools often remain uncleaned for thirty or forty years. 680-A, 16th July 1875.

AHMEDABAD.
Conservancy.

and in carts or on donkey-back from the dust-bins, is taken to one of three stores, the Daryápur store, three-quarters of a mile to the north-east; the Ráypur, half a mile to the south-east; and the Jamálpur, a mile to the south of the city walls. At these stores the night-soil, mixed with wood ashes, is thrown into trenches 40 × 15 and six feet deep, covered with street sweepings, and after lying for five or six months, is sold to farmers, fetching about fifteen pence a ton, or six pence (4 *as.*) a cart. To these stores also dead animals are brought and their bones gathered and sold. There is one private slaughter-house for cattle in Mirzápur, and fifteen places in Jamálpur and Sháhápur where sheep and goats are killed.

Health.

For about eight months in the year the wind blows from the west. East and south-east winds are uncommon. Deaths are registered by the police, and as all dead bodies pass through one of the city gates on their way to the burning or burying grounds, the death figures are probably complete. It is perhaps partly due to this that the Ahmedabad death-rate seems so high. During the five years ending 1877 the yearly number of deaths averaged 5848 or 50·04 the thousand. Of the whole number 134 or 2·29 per cent were due to cholera, 6 or 0·10 per cent to small-pox, 3369 or 57·60 per cent to fever, 133 or 2·27 per cent to bowel complaints, 44 or 0·75 per cent to injuries, and 2162 or 36·96 per cent to other causes. The mean death ratio to one thousand was, among Christians 7·58, among Musalmáns 42·53, among Hindus 52·13, and among other classes 38·08. The fever return is very large, three times as high as Bombay. The greater healthiness of Musalmáns than of Hindus is, in the Sanitary Commissioner's opinion, due partly to the Musalmáns' more strengthening diet, and partly to their greater cleanliness.

Early in the seventeenth century (1618), for several years about 1685, and again at the beginning of the present century (1813), Ahmedabad was visited by a disease, in many of its symptoms like the true plague.[1] Since its transfer to the British the city has been very free from outbreaks of cholera and other epidemic diseases.

Hospitals.

The city has, within the walls, one hospital and two dispensaries with, during 1877, a total number of 41,526 patients, of whom 39,215 were out-door and 2311 in-door. There are besides two other institutions, both outside the walls, one a lunatic asylum on the north outside the Delhi gate, and the other a hospital for leprosy and other loathsome and incurable diseases, in the south-east outside the A'stodiya gate. The civil, or the Hatising and Premábhái hospital with accommodation for ninety-two in-patients, was opened in 1859 at a cost of about £5200 (Rs. 52,000). In 1877, 2203 in-patients and 10,952 out-patients were treated here. Part of the hospital is given up to the use of the invalids of the police force, of whom 258 out of a total strength of 285 were treated in 1877. The Ráypur dispensary, built in 1872 by the municipality at a cost of £1950 (Rs. 19,500) has room for nine in-patients. In 1877 there were eleven

[1] Details of these outbreaks are given in the Health chapter (p. 218).

Chapter XIV.
Places of Interest.
AHMEDABAD.
Hospitals.

in-patients and 18,417 out-patients treated here. The Bechardás dispensary was built in 1865 at a cost of £760 (Rs. 7600) by Ráo Bahádur Bechardás Ambáidás, C.S.I., a wealthy Ahmedabad merchant; it has room for ten in-patients. In 1877, ninety-seven in-patients and 9846 out-patients were treated. The lunatic asylum, situated at a short distance outside the city on the left of the cantonment road, was opened in 1863 at a cost of £1863 (Rs. 18,630). With accommodation for 108 patients it has about fourteen acres of land attached to it, tilled by the inmates. The building, in the form of a cross, has cells back to back, and is enclosed by a ten-feet high wall, the whole forming a rectangle 181½ feet by 158. The interior is arranged in four divisions of which one is set apart for women. In 1877, twenty-three were treated. People from any part of Gujarát may make use of this institution; most of the patients are from the agricultural classes.[1] The leper hospital at Kágdápith immediately outside the A'stodiya gate was opened in 1867 at a cost of £162 (Rs. 1620). It has room for forty-five lepers and for thirty others afflicted with loathsome and incurable diseases. During seasons of epidemic sickness, arrangements are made for the treatment of small-pox and cholera patients.

There is also the animal home, *pánjrápol*, of which details are given (p. 280) under 'Objects of Interest.'

Market Places.

In 1863 the municipality opened a vegetable market in a street leading from the Káranj, but as yet it is not much used. The three old markets are, in the Mánekchok, in the street north of the Mánekchok and east of the Three Gateways and in the open space towards the Káranj. There are no stalls in the streets, the dealers raising cloth booths over their wares. In the Mánekchok are the shops of the chief bankers, jewellers, and native piece-goods dealers. In front of these every afternoon from about three till dark, is held a market, where people from the city and surrounding villages come together and buy cotton and silk goods, brocade, gold and silver lace, and ready made articles of children's dress. In the street east of the Three Gateways are European piece goods, hardware, sweetmeat, and vegetable shops. In the open space towards the Káranj (p 273) where are grocery and betel-leaf shops, the old weekly *Juma* or Friday market is still held, lasting in all sorts of weather from nine in the morning to four in the afternoon. On market days, a large part of the square from the Three Gateways to the Káranj is full of rows of sellers squatted on the ground, their wares in front of them, surrounded by crowds of buyers and lookers-on from the city and from several miles round. Besides almost every article of native personal and household use, horses, cattle, goats, poultry, parrots and other birds are offered for sale. Grain is sold at several places, but the chief grain market is at Dánápith in the Jamálpur division.

Burying and Burning Grounds.

The burial ground now in use for Christians (p. 270), one part for Protestants the other for Catholics, is close outside of the Khán Jahán gate in the south-west of the city. Musalmáns are buried in

[1] Surgeon Major C. Johnson, Civil Surgeon, 1874.

many grave-yards round the city. Hindus, except the Shrávaks or Jains who burn their dead near the Sháhápur gate, have their burning ground at Dudheshvar[1] on the river bank about a mile above the city. Kolis, Márvádis, and other low class Hindus bury their dead in the sand of the river bed.

Section VI.—City Divisions.

Survey Divisions, 1824.

The survey register of 1824 shows that the city within the walls was at that time divided into nineteen wards. Of these, as shown in the map, the nine in the north half, were, beginning from the north-west, Khánpur, Sháhápur, Mirzápur, Idarya, Daryápur, Jawheriváda, Denkuva, Tinlimbdi, and Bhanderipur; the ten in the south half, were, Khádiya, Sárangpur, Ráypur, A'stodiya, Jamálpur, Ráykhad, Bhadar, Khás Bazár, Pánkor, and Mánekchok. Of these wards, which then contained 22,282 Hindu, 6913 Musalmán, and four Pársi[2] or a total of 29,199 houses, the records of the 1824 survey give the following details:

Small in area, the ground broken and partly tilled, and in the north occupied by scattered groups of houses, Khánpur in 1824 contained 111 Hindu and 133 Musalmán, or a total of 244 houses. Of buildings there were four mosques, and a handsome palace styled Chánd-Suraj Mehel with a garden. Of the mosques that of A'lam Chishti, built about 1413 (815 H.), was handsome and in good repair, but spoiled of its best marble slabs. The domeless mosque of Sidi Hálim, built by a minister of Sultán Ahmad, also in good repair, is said to have been used by the Maráthás as a stronghold, and to have held out against cannon in Shelukar's time (1800).

Sháhápur.

To the north and east of Khánpur, Sháhápur had 1949 Hindu and 696 Musalmán, or a total of 2645 houses. Near the centre was rough ground, formerly held by Musalmáns, but in 1824 growing millet and vegetables. Of public buildings there were thirteen mosques, seven temples, and two rest-houses. Of the temples, one styled Sadu Bái Deri was, about 1816, built in honour of a Bárot's wife, who, falsely charged with adultery, to save herself from public shame, was at her own wish stabbed by her husband. The Marátha government allowed the slanderer to go unpunished, but the towns-people dragged him outside of the Kálupur gate and stoned him. Of the mosques one was Kázi Muhammad Chishti's, built in 1564 (972 H.)

Mirzápur.

To the south-east of Sháhápur was Mirzápur, formerly held chiefly by Musalmáns. In 1824 much of this ward was rough broken ground under tillage. The total number of houses was 1026, 312 of them Hindu and 714 Musalmán. Of public buildings there were thirteen mosques, one temple, and one rest-house. Of the mosques, one was Malik Shábán's with a large dome sixty feet round.

---

1 According to the local story Dudheshvar takes its name from the milk of the heavenly cow, *Kámdhenu*, which Indra and the gods used to purify the spot before the funeral of Dadhichi Rishi. Bom Quar. Mag. I. 432.

2 Now (1879) there are 85 Parsi houses. Mr. J. F. Fernandez, Huzur Deputy Collector.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Survey Divisions, 1824.

To the north and north-east of Mirzápur, Idarya in 1824 contained 1909 houses, 1619 of them Hindu and 290 Musalmán. Much of this ward was occupied by the huts of masons, potters, Dheds, and other low castes; there were thirteen mosques, four tombs, and eleven temples.

Daryápur.

Daryápur, partly to the north-east and partly to the south-east of Idarya, had in 1824 very little waste or open ground. There were 1598 houses, 1460 of them Hindu, most of them of the Kanbi class, and 138 Musalmán. Of buildings, there were eleven mosques, four tombs, and twenty temples. Of the last one was raised in honour of a *sati.*

Jawherivída.

To the south of Daryápur and east of Mirzápur was Jawherivída, inhabited on the east almost entirely by Vániás, and on the west partly tilled and partly waste. There were 928 houses, 860 of them Hindu, 67 Musalmán, and one Pársi. Of buildings, there were six mosques, thirteen Jain convents, *apásrás,* and temples, and fourteen other Hindu temples, one rest-house, and one animal home, *pánjrápol.* Of Musalmán remains there was the tomb of Sháh Ali Rozak, one of the holy men of Sultán Ahmad I.'s court.

Denkuva.

To the east of Jawherivída was Denkuva, small but thickly peopled chiefly by Shrávaks. There were 1446 houses, 1313 of them Hindu and 133 Musalmán. Of buildings there were three mosques, eight Jain temples and convents, *apásrás,* and twelve other Hindu temples, and two rest-houses.

Tinlimbdi.

To the north-east of Denkuva and east of Daryápur was Tinlimbdi; in the north thinly peopled, but in other parts closely built. The bulk of the people were Bohorás, Vániás, and Bráhmans. Of 2400 houses, 1504 were Hindu and 896 Musalmán. Of buildings there were twenty-two mosques, the Nav Gaz Pirs' tombs, nine temples, and one rest-house.

Bhanderipur.

To the east of Tinlimbdi, stretching along the east-wall between the Premábhái and the Panchkuva gates, was Bhanderipur, a well-peopled long narrow strip of 2507 houses, 967 of them Hindu, chiefly Kanbis and Khatris, and 1540 Musalmán, many of them Bohorás. Of buildings there were thirty-three mosques, twenty tombs, seven temples, and one pond, the Chandan Talávdi called after A'sa Bhil's daughter, near which were some wells, *masrukuvás,* (p. 322) used for washing silk.

Khádiya.

Khádiya was very small but closely built and enclosed between Bhanderipur and Ráypur on the north and south, and Sárangpur and Denkuva on the east and west. Of 1525 houses, 1303 were Hindu and 222 Musalmán. Of buildings there were seven temples and one mosque.

Sárangpur.

Enclosed between the south-east city wall and Khádiya and Ráypur, Sárangpur had 1409 houses, 1327 of them Hindu, chiefly Bráhman, Vánia, and Kanbi, and 82 Musalmán. Of buildings there were four mosques, one Jain convent, *apásra,* four Bráhman temples, and one rest-house. Of the mosques, that of Daulat Khán, twenty feet high, made chiefly of stone, surmounted with six domes and one minaret, and surrounded by a large number of Musalmán tombs, was built by a saint Muhammad Ghaus. Another was a stone-built, double-terraced, and five-domed

mosque raised by Sultán Ahmad I. and styled Malik Sárang's mosque. The paved court in front was, in 1824, let to silk weavers who paid a certain fixed rent to the head Syed. Ráni Bibi's tomb to the east was a stone building with one large and five small domes.

To the west of Sárangpur was Ráypur. To the north, part of this ward was cut off from the main body by the Khádiya division. Large and closely built, Ráypur came next in size to A'stodiya, with, in 1824, 3475 houses, 3370 of them Hindu, chiefly Bráhman, Vánia, and Kanbi, and 105 Musalmán. Of buildings there were three mosques, three Jain convents, *apásrás*, and sixteen Bráhman temples.

A'stodiya.

To the west of Ráypur, A'stodiya covering a large area from the south wall to Mánekchok in the centre of the city, was the most populous division of Ahmedabad. In 1824 it had 3877 houses, 3378 of them Hindu, mostly Vánia, and 499 Musalmán. Of buildings there were ten mosques, one Jain[1] and ten other Hindu temples, and three rest-houses, two for Hindus and one[2] for Musalmáns.

Jamálpur.

To the west of A'stodiya, was Jamálpur, a rather small ward in the south-west corner of the city. In 1824 it had 1633 houses, 1065 of them Hindu and 568 Musalmán. Of buildings there were nine mosques and one temple. Of the mosques one was Haibat Khán's, and another the tomb and mosque of Nawáb Sardár Khán.[3] There was also a private building, Sidi Salim's palace,[4] *haveli* (p. 327), called after one of Sultán Ahmad I.'s Arab officers. Under the Gáikwár government it was held by troops and in 1824 had the houses of native officers and of the garrison.

Ráykhad.

To the north of Jamálpur and along the west wall was Ráykhad, in 1824 most of it broken ground covered with ruins. Hindu houses numbered 306 and Musalmán 256, making a total of 562 houses. An open space to the north-east styled Khámása's *chakla*, had one or two rows of butchers' and horsemen's, *savárs'*, houses. In Musalmán times the Ráykhad palaces and buildings were among the best in the city. Of buildings there were seven mosques, two temples, two rest-houses, and several water-towers, *bambás*.

Bhadar.

Of the citadel or Bhadar to the north-west of Ráykhad, details are given (p. 275) under the head 'Objects of Interest'. The Bhadar has no *pols* or minor divisions. At the time of the 1824 survey it contained 618 houses, 548 of them Hindu and 70 Musalmán, inhabited chiefly by the families of people attached to the public offices.

Khás Bazár.

South-east of the Bhadar, the Khás Bazár, small in extent, had, in 1824, 355 houses, 121 Hindu, 231 Musalmán, and 3 Pársi. With no

---

1 See foot-note 1, p. 302.

2 'This the *Kázi-ka Mandar Sála* was built about three centuries ago by the then Kázi of the city. It is a handsome brick building with a terrace at the top. To the west is the burial place of Mustak Sháh, and to the east the residence of the present (1824) Kázi.' Survey Record, 1824.

3 The tomb, *roza*, was built of stone and floored with marble; the mosque was of brick. Over the gateway were two domes with gilt balls and over the place of prayer two minarets topped with gilt balls. Survey Record, 1824.

4 The surrounding wall was of brick, and the towers six in number were faced with stone. Survey Record, 1824.

Chapter XIV.
Places of Interest.
AHMEDABAD.

definite *pols*, the houses in this ward were very much scattered, and the population consisted chiefly of Musalmáns. There were four mosques, one temple, and a house styled *Sandar Sháh Sála* (not identified) where beggars were fed.

Pánkor.

East of Khás Bazár, Pánkor, another small division, had, in 1824, 444 houses, 232 of them Hindu and 212 Musalmán. There were five mosques.

Mánekchok.

East of Pánkor, Mánekchok had, in 1824, 598 houses, 537 of them Hindu, chiefly Bráhman and Vánia, and 61 Musalmán. There were four mosques and one Hindu temple.

Municipal Divisions, 1879.

Since the introduction of the municipality, the old city wards have fallen into disuse and in their stead the area has been divided into four parts,[1] Sháhápur in the north-west; Daryápur in the north-east, Khádiya in the south-east, and Jamálpur in the south-west. Of these Sháhápur with an area of about 451 acres, divided into forty *pols*, has 6963 houses,[2] 2820 of them first class, and a population of 21,177 souls, of whom a large number are of the poorer class, Dheds, Vághris, and Bhangiás. Sháhápur is the largest, poorest, and most thinly peopled division of the city. It comprises the old wards of Sháhápur, Khánpur, Mirzápur, and Bhadar, and portions of Idarya and Khás Bazár.

Since 1824 Sháhápur has considerably improved. The rough open ground has partly been built on by well-to-do Shrávaks and Kanbis and partly taken up for the Ahmedabad spinning and weaving company's mill. None of it is now set apart for crops. Khánpur is still backward with poor Musalmáns, Dheds, and Bhangiás. Melons are grown in a few patches here and there. In the west along the line of the city walls are some fine dwellings chiefly occupied by European officers. Mirzápur shows much improvement, the high road to the cantonment passing through it. It contains the Protestant and Roman Catholic churches (p. 279), the civil hospital, the residence of Ráo Bahádur Premábhái Hemábhái Nagar Seth, travellers' quarters, and several dwellings for European officers, among them those of the Executive Engineer for irrigation and the Deputy Surgeon General, who hold their offices in their own houses. The western part near Khánpur is still, comparatively speaking, waste. In this sub-division a large building, formerly the civil hospital, was on the transfer of the hospital bought by Mr. Sorábji Jamsedji Jijibhái, and in memory of his daughter-in-law Gulmáji, set apart as a rest-house for Pársis. Except that the Delhi gate is sometimes so called, the name Idarya is no longer used. The land on each side of the camp road is known as Delhi Darváza *chakla*, and the rest is known by the names of the different *pols*. The Khás Bazár is now one of the most important places in the city, and the land there is very valuable. The main road is lined with shops, most of them rebuilt on a regular plan since the 1875 flood. Of the Káranj (p. 273), the Three Gateways, or Tin Darváza (p. 273), and the Bhadar (p. 275) separate accounts

[1] Most of the details about the present (1879) city divisions and suburbs have been supplied by Mr. J. F. Fernandez, Huzur Deputy Collector; see foot-note 5, p. 262.
[2] The house return is for 1879 and the population for 1872.

have been given under 'Objects of Interest.' Of the two Rám temples in the Bhadar, one inside the Rám gate, was built in the time of the Maráthás at a cost of about £500 (Rs. 5000). The temple servant is a Dakshani Bráhman; the repair and other charges are met from a yearly cash allowance of £10 (Rs. 100), and grain and other alms placed daily before the images, by persons bathing in the river. To the north of this is the Krishna Mandir, built, during the time of the Maráthás, at a cost of about £800 (Rs. 8000). The floor of the temple is of marble. The temple servant is a Telang Bráhman, who receives a yearly cash allowance of £53 (Rs. 530). Further north, outside of the Collector's garden is the Vithal Mandir, built during the time of the Maráthás, at a cost of about £500 (Rs. 5000). The temple has a yearly grant of £50 (Rs. 500), and the temple servant is a Dakshani Bráhman. The management of these three Marátha temples, of Rám, Krishna, and Vithoba, is in the hands of committees, *panch*, appointed by Government; the temple servants, though they receive the cash allowances, act according to their directions. The other Rám temple is opposite the Krishna Mandir, and was built in 1845 at a cost of about £300 (Rs. 3000) by a Dakshani Bráhman. Besides these there is a temple of Hanumán and an underground temple of Shiv Pátáleshvar. All these Marátha temples are in the Bhadar.

Sháhápur.

Of the people of this division about two-thirds are Hindus, many of them of low caste; the rest are Musalmáns. The manufacture of paper, formerly carried on here on a large scale, has of late suffered much from the competition of cheap European paper.

Daryápur.

East of Sháhápur and forming the north-east corner of the city, Daryápur covers about 296 acres, divided into 132 *pols*, and according to the 1872 census, has a population of 32,971 souls living in 10,649 houses[1] of which 7058 are of two or more stories. Daryápur comprises the old wards of Daryápur, Jawheriváda, Bhanderipur, and Tinlimbdi, and portions of Idarya, Pánkor, and Denkuva. With very few plots of waste land, this division is, especially towards the east and south-east, most thickly peopled, and is little more than a network of the gated wards, *pols*, of which some account is given in the description of Khádiya, the next division of the city. Daryápur is the head-quarters of the trading classes. Of Hindus except Nágar Bráhmans and Kshatris almost all the upper castes, especially Vániás both Jain and Bráhmanic, are found in great strength; there are also large numbers of Musalmáns, the Bohorás in trade and the rest chiefly weavers. In a few outlying spots are settlements of Bhangiás and Dheds. Of objects of interest there is in Jawheriváda, the residence of the Jain family whose head has, for about 150 years, held the hereditary post of Nagar Seth or chief of the city. It is a building of great size enriched with some of the best Ahmedabad wood carving. With so large and rich a Jain population this division contains several convents, *apásrás*, and many Shrávak temples[2] dedicated chiefly to Chomakji, Mahávir Svámi, A'desar Bhagván, Chintáman, Ashtápadji, Shambhavnáth, and Mandir Svámi. Like the Shrávaks the Meshri Vániás have

[1] The house return is for 1879.
[2] Details of the chief Jain temples are given at pages 250, 285, 300.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Municipal Divisions, 1879.
Daryápur.

some important temples. The chief are two very rich ones of the Gosái Mahárâj in a spacious building in the Dosiváda *pol*, one dedicated to Natvarlál and the other to Shámlál. Into neither of these is any one but a Hindu allowed. Daily, between six and eleven in the morning, and again between four and six at night, when the gods are awake, worshippers attend in large numbers and on special days in dense crowds. Every day about £20 (Rs. 200) worth of fruit and other food that has been offered to the images, is distributed among the richer worshippers, who in return make large money gifts. These Gosái Mahárája's temples,[1] which except for their coating of red and yellow wash look like dwellings, were built about eighty years ago at a cost of £8000 (Rs. 80,000), partly the gift of worshippers, partly paid by the Mahárâj. In Dhana Suthár's *pol* a temple, dedicated to Ambáji Máta, is held in great veneration by Bráhmans, and Vániás, Jain as well as Bráhmanic. The image of the Máta was at first kept in the house of a Tapodhan Bráhman. In 1848 (1903 S.), at the consecration of Hatising's temple, people gathered in crowds. Among the worshippers and visitors cholera broke out, and many vows were made to Ambáji Máta if only she would stay the sickness. The cholera did not spread, and the people, holding the goddess in high veneration, built her a temple at a cost of about £200 (Rs. 2000). The temple is in charge of a descendant of the Tapodhan Bráhman who first owned the image. The Mohota Rámji's temple, in Hája Patel's or Rámji Mandir's *pol*, is the oldest Meshri or Vaishnav temple. Its statue of Rám originally belonged to a Modh Vánia, who going on a pilgrimage to Dwárka overtook by the way two Khambháliya Guglis[2] or priests and went with them to Dwárka. When about to return, they asked for a gift. The Vánia said: "If you come to Ahmedabad with me, I will serve you well." One of them came and was put in charge of Rámji's statue. About 100 years ago when the Peshwa and Gáikwár held Ahmedabad, wealthy Modh merchants collected £5000 (Rs. 50,000) to build a temple. It was dedicated to Rámji and entrusted to the Gugli. The building is at present out of order, all its revenues being spent on a large colony of devotees. In the grounds of the old mint (p. 280) in the south of Daryápur, a girls' school has been established by Setháni Harkuvarbái. Of the Svámi Náráyan temple (p. 279); of the animal home, *pánjrápol* (p. 280); and of the Dutch factory (p. 272) separate accounts have been given. Though most of the wells in this division are salt, a vein of sweet water fit for drinking, runs along the city wall in the east. The water of some of these wells (p. 318) near the Premábhái gate, is used for nothing but washing silks, as it is said to give them a special gloss.

Khádiya.

Khádiya, the smallest and most thickly peopled division of the city, has an area of about 238 acres divided into 115 *pols*, and a population, according to the 1872 census, of 33,649 souls living in

[1] The present head of the temples is Lálbáva also called Varajráy Mahárâj.

[2] Khambháliya is a small town in Navánagar in Káthiáwár. Gugli is a caste of Bráhmans found in Dwárka and in some parts of Káthiáwár, corresponding, as regards their offices, to the Chobás of Gokal Mathura or the Badvás of Pandhárpur.

10,605 houses,[1] of which 8829 have two or more stories, and most are well and strongly built. Khádiya comprises the old wards of Khádiya, Ráypur, Sárangpur, and parts of Mánekchok, Denkuva and A'stodiya. Raised above the level of the rest of the city, Khádiya is the favourite quarter for high class Hindus, and so close are the houses that, in many places, the streets are little better than passages not broad enough for two bullock carriages to meet. The houses of this division are built in groups or clusters known as *pols,* probably dating from 1738 the time of disorder and fear that followed the break-up of Muhammadan rule, and still a useful help to the police in checking the movements of thieves and other criminals. The chief feature of these groups is that each has a separate entrance protected by a gateway, *pol,* with a picket house on the top of it. Inside of the gateway the houses of the group form one or more streets, the ends either blocked by a dead wall, or, through a small door, *bári,* opening into another group. Inside the *pols* the roads are rough, narrow, and winding, fit in many cases only for foot passengers. Most of the houses are first class, the walls massive and the timber strong. Some of them, especially those about fifty years old, are ornamented with much rich and finely cut wood-work. From their fondness for this part of the town and the want of open sites, the families as they grew larger, added story on story to the old houses, the upper stories often jutting out so far that, when two opposite houses were enlarged, their eaves almost met across the roadway. Inside of most two or more storied houses is a yard, and under the yard a covered reservoir with supplies of rain water for drinking. Part of the courtyard is sometimes raised into a terrace and used as a lounge or for drying grain, pulse, and clothes. In these houses valuables are, if unwieldy, stowed away in secret under-ground cellars with most carefully hid entrances. Some of these cellars have air shafts run through the walls, so that they may be used as retreats for men in hiding. The jewellery 'safe' is usually a hole in the house wall or in one of the main beams, hidden so cunningly that no stranger can find it out, and its secret so jealously guarded, that it is known only to the head of the house, his wife, and one or two of his most trusted children. The people of these *pols* form, to some extent, separate communities, each with arrangements for managing its common affairs (p. 294).

The people of the division are Hindus and Musalmáns. The Hindus are well-to-do; traders, bankers, Government servants, pleaders, and artisans. Khádiya is the only quarter of the city where Nágar Bráhmans and Kshatris live. The Musalmáns, numbering a little more than one-sixth of the whole population, are chiefly Bohorás of both sects. Of other Musalmáns there are not many, and their general poverty is driving them into the poorer quarters of the city, while their houses pass into the hands of the thrifty Jain and other Vániás. In parts of the outskirts live Dheds and Bhangiás.

Every large *pol* has a Bráhman or Jain temple, or a mosque. Some of the Jain temples are well built with beautiful white stone carving. The mosques are small and plain. In some of the *pols* are Jain convents, *apásrás,* for religious devotees both men, *gorjis,*

[1] The house return is for 1879.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Municipal Divisions, 1879.
Khádiya.

and women, *gurnijis*. Among the devotees are two classes, those who have altogether, and those who have only partly given up the world. The out-and-out devotee dresses in yellow, owns nothing, and lives on food given or sent him ready cooked; the part devotee dresses in white, may own some money, and may cook his food. The Kabirpanthi temple in this division was built about 1834 at a cost of about £500 (Rs. 5000). The head of the temple is Hirádásji. The Kabirpanthis, who pray to Kabir and use no images, belong to twelve and a half sects, *panths*. Two other small Kabirpanthi temples, one near the Daryápur gate, and the other in Sánkdi *seri* in Khádiya, have, on a point of succession, separated from the chief body. Built about 1842, Dvárkánáthji's temple in Dolatkhána in the old Ráypur ward, cost about £1000 (Rs. 10,000) subscribed by Vaishnavs. It forms a branch of the Mohota Dvárkánáthji's temple of Gosái Maháráj in the Kánkroli village of Meywár, to the head of which it belongs. The temple of Rámsnehi in the Pakháli *pol* of this division, was built about fifty years ago by Sádhu Khemdásji, a disciple of Dulerámji Maháráj, and cost about £300 (Rs. 3000). The chief seat of the sect is at the village of Sáypur in Meywár, where there are about 1000 followers, *sádhus*. The Rámsnehi is an offshoot from the Rámánandi sect. Rámsnehi *sádhus* accept no other charity than cooked food, and worship no images. Of their origin the story is that about 100 years ago, a Vánia by name Rámcharanji was the manager, *kárbhári*, of some chief. One night he dreamt he was borne away by the stream of a river, when a holy man drew him out and carrying him to the bank, said, "Why are you here; get up." He awoke and set out to see the man who had saved him. About six miles from Sáypur, at the suburb of Dátardu, he saw a Rámánandi *sádhu* by name Kirpárámji and knew him to be the man who had saved him from drowning. He became his disciple and was thus at first a follower of the Rámánandi faith. For some years he used to beg flour, and, baking it, give the cakes to the devotees. One day while cooking he saw ants on a piece of wood in the fireplace. He took the wood to his spiritual adviser Kirpárámji, and said, "This is an act of sin." Kirpárámji said, "If you sit in one place and pray to Rámji, you will be blessed." On this Rámcharanji began to pray in a lonely place, and to beg cooked food. Thus was established the sect of the Rámsnehi or friends of Rám. The founder of this faith composed 36,250 Hindustáni songs, some of them still sung by his followers. He was succeeded by Rámjananji, Uderámji, Chaturdásji, Nárandásji, Hardásji, and Hematrámji, the present holder of the chief seat of the faith at Sáypur. In Ranchhodji's *pol* in Sárangpur *chakla* is the Ranchhodji's temple built at a cost of £1000 (Rs. 10,000) by Gujar Vániás. It is visited by all Hindus but the Jains. During Shelukar's time (1798-1800), there were two or three rooms outside the Sárangpur gate, and in one of them this image is said to have been found. It was brought into the city and kept at first in a Bráhman's house. The Rádha Vallabhji's temple was built at a cost of about £800 (Rs. 8000). It belongs to the Rádha Vallabhjis, an offshoot of the Vallabháchári sect.

Its high level saves the Khádiya division from the risk of flooding; even the great 1875 flood did it no harm. Eighteen months later a

fire (p. 262) broke out, and lasting for one night and part of the next day destroyed the Sárangpur *phalia*, one of the best *pols*, and was not brought under till the troops were called in to help the police. As in other parts of the town the water of most of the wells is too brackish for drinking. But as in Daryápur, a row of wells, sunk along the line of the city wall, yields water sweet enough for either drinking or cooking.

Jamálpur.

West of Khádiya is Jamálpur with 315 acres divided into sixty-nine *pols*, and a population of 23,883 souls living in 9331 houses,[1] of which 4514 have two or more stories. Of these, as in Sháhápur, a little more than two-thirds are Hindus and the rest Musalmáns. Among the Hindus are Meshri Vániás, Kanbis, Bráhmans, and a few Jains. Among the Musalmáns are many Bohorás and Momnás, both of them thrifty and well-to-do. In some outlying spots are a few Dhed and Bhangia huts. Calico printing employs a very large number of people both Musalmáns and Hindus.

Jamálpur includes the old wards of Jamálpur and Ráykhad and parts of Mánekchok and A'stodiya. Since 1824 the old Ráykhad ward has been much improved by the spread of buildings, and by the opening between 1864 and 1867 of the Oliphant road from the Mánekchok to the A'stodiya gates, and of the Lee road running into Káranj square. There is now no regular tillage; from the few open patches only cucumbers are grown. Besides the Bechardás spinning and weaving mill, and a few European dwellings, there are, of buildings and places of interest, the mission house and high school, the Premchand Ráychand training college, the Lakshmibái training college, the Prárthana Samáj temple, the post office, the Ellis bridge, the municipal offices, the Government telegraph office, the Mánekchok market, the alms-house, *langar-khána*, the Jáma mosque (p. 271), the Gáikwár's palace, *haveli* (p. 277), the Pársi fire temple, and Sidi Salím's palace. The mission house and high school were built in 1874-75 at a total cost of £7545 (Rs. 75,450), of which, besides the site valued at £1000 (Rs. 10,000), Government gave £1500 (Rs. 15,000) and the mission, from funds and subscriptions, £5045 (Rs. 50,450). The Premchand Ráychand college was built in 1867-68 at a cost of £8820 (Rs. 88,200) of which Mr. Premchand gave £3400 (Rs. 34,000). Its special object is to train masters for Gujaráti schools. The Lakshmibái college was built in 1875 at a cost of £3000 (Rs. 30,000), of which £1500 (Rs. 15,000) were given by Government, £500 (Rs. 5000) by the Ahmedabad municipality, and £1000 (Rs. 10,000) by Ráo Bahádur Bechardás Ambáidás, C.S.I., after whose daughter the college is called. Its special object is to train teachers for Gujaráti girls' schools.

The *prárthana mandir*,[2] or prayer house, the meeting place of the Prárthana Samáj, or prayer union, was built in 1876 at a cost of £1200 (Rs. 12,000).[3] The ordinary charges are met from a fund

[1] The population return is for 1872 and the house return for 1879.

[2] From materials kindly supplied by Ráo Sáheb Mahipatrám Ruprám, the secretary and one of the leading members of the Ahmedabad Prárthana Samáj.

[3] The chief contributors were Ráo Bahádur Bechardás Ambáidás, C.S.I., £550; Ráo Bahádur Bholánáth Sárábhái, £200; Mr. Ranchhodlál Chhotálál, £100; Ráo Bahádur Gopálráv Hari, £50.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Municipal Divisions, 1879.
Jamálpur.

formed from the free-will gifts of the members. The street front of the building is a tower, except for a clock in the face of it, little different from the tower of a modern Shaivite temple. The inside of the tower is used as a library, and on each side is a small room, through one of which a staircase leads to two side-galleries. There are two main doors, one in the north or tower end, the other in the south. Passing through the north door, the body of the building is a hall forty-eight feet long from north to south, and twenty-four broad from east to west. This hall is lighted from glass-windows in the east, south, and west walls, and is on either side shaded from the sun by a covered verandah. In the south end of the hall, opposite the tower, is a platform with a chair and table set for the preacher. Facing the preacher is a second platform, lower and carpeted, set apart for the hired musicians. On either side is a double row of benches and chairs for the worshippers. Above the benches on each side is a woman's gallery entered from the stair case in the tower, and cut off from the rest of the hall by a row of bamboo screens.

The Ahmedabad Prárthana Samáj dates from the 17th December 1871, when Government called on all classes of the people to offer thanks for the recovery from sickness of H. R. H. the Prince of Wales. At Ahmedabad some of the leading men of the city called a meeting of all creeds in the grounds of the training college. So largely was the meeting attended, that some men of high position and education, who had long been anxious to start a theistic society, determined to hold weekly Sunday meetings for the worship of 'God the Creator and common heavenly Father of mankind.' At the end of the first year (December 1872) there were thirty-four members, and the number is now (March, 1879) 109. The members are almost all Hindus, chiefly of the upper class, Bráhmans, Kshatris, and Vániás, most of them Government servants and pleaders; there are also a few husbandmen and craftsmen of the Kanbi, Suthár, Luhár, and Koli castes, and there is one Musalmán and one Pársi. Caste-feeling is so far respected that no one of the Dhed, Bhangia, or other depressed classes is allowed to attend. Some Christians come to the meetings but none have formally joined the sect. So far the Hindu members have not cut themselves off from their old faith, or made any change in their marriage, funeral, and other family rites.

The chief articles of faith are a belief in an all-powerful Creator to be worshipped without an image and without a mediator, who holds man responsible for his actions and will reward or punish him in a future state. A Gujaráti form of faith, a book of prayers, and a set of hymns, partly composed by Ráo Bahádur Bholánáth Sárábhái, and partly compiled from Vedic and Puránic verses, have been published and are used by most of the members. No one is set apart as a teacher or spiritual guide. A few of the most zealous members generally lead the public worship in turns. The public services are held on Sunday afternoons and sometimes on other days. But the holy days of other religions are not treated with any special honour. At the beginning of each service all stand, and the preacher repeats a Gujaráti prayer from the prayer book. He then chooses a text from the hymn book, and from it preaches or reads a sermon

either on the character of God or in praise of temperate, just, and kindly living. After the sermon all stand, and the preacher sings a hymn to a Hindu air, the congregation repeating each verse in chorus. Then the hired musician playing on a large guitar, *tambura*, and accompanied by two violins, *sárangis*, and a drum, chants a psalm. With this the service generally ends.

Besides in Ahmedabad the sect is spreading and there are, some of them it is true little more than names, Prárthana Samájs at Kaira, Nadiád, Petlád, Sojitra, Baroda, Broach, Hánsot, Anklesvar, Surat, and Navsári.

The Ellis bridge, across the Sábarmati, built in 1870-71 at a cost of £54,920 (Rs. 5,49,200) was, except two spans on the Ahmedabad and one on the opposite bank, carried away in the 1875 flood. The two spans are still in the evening a favourite resort of the city people. Close to the bridge is a large jail garden. A branch from the Oliphant road leads to the municipal buildings, a municipal office, a conservancy office, and a weighing shed, the whole surrounded by a wall. In a large open space, in front of the municipal buildings, is the grain market, in the dry season always a place of much business. Across the plain about 300 yards from the municipal buildings is the Government telegraph office built in 1872-73.

Among charitable institutions is one connected with Sultán Ahmad I.'s tomb and in his honour known as Sultán Ahmad's alms-house, *langar-khána*. The endowment yielding a yearly income of £252 (Rs. 2520) is, subject to the Collector's approval, managed by a committee of Musalmán gentlemen. Of the whole amount a portion is spent in feeding Musalmán beggars, *fakirs*, with cooked rice and pulse, *khichadi*, at the rate of fifty pounds (1¼ *mans*) a day. Besides this food dole a yearly fair, *uras*, is held in honour of Sultán Ahmad; a staff of one clerk, two messengers, a cook, a water-carrier, and, to play morning, evening, and night at the tomb, five kettle drummers, *nagárchis*, is kept up. During the last nine years from surplus funds, £300 (Rs. 3000) were in 1875 spent in rebuilding the Alif mosque opposite the Káranj, and £300 (Rs. 3000) more in relieving the distress caused by the flood of that year.

Another street branching from the Oliphant road leads to the Pársi fire temple, *agiári*. It is a small commonplace building raised in 1845 by one Kharsedji Bairámji.[1] In this division is the old building Sidi Salim's palace, *haveli* (p. 319). It was formerly the residence and office of the assistant collector of continental customs and excise, who had charge of the Ran salt works and the frontier. It is now used as a jail for civil debtors.

Old Suburbs.

The author of the Mirát-i-Ahmadi writing about the middle of the eighteenth century (1748-1762) gives the names of 110 suburbs.[2]

---

[1] Close by is a tower of silence raised soon after by general subscription. Briggs' Cities of Gujaráshtra, 270.

[2] The details, kindly supplied by Major Watson, are: 1, Sháhápur or Kázipur; 2, Hájipur; 3, Daryápur, founded by Darya Khán, one of Mahmud Begada's nobles, the dome of whose tomb is said to be the largest in Gujarát, 4, Multánpur;

Chapter XIV.
Places of Interest.
AHMEDABAD.
Old Suburbs.

Of eight of these the origin is not given; eighty-three were founded under the Ahmedabad kings, and nineteen under the Moghal viceroys. At the time when he wrote, it would seem, though this is not quite certain, that of the 110, eighteen were deserted, three had become Daskroi villages, and eighty-nine were still suburbs. In the time of prosperity the suburbs

---

5, Maksudpur, in 1622 made into the Sháhi Bág; 6, Máhpur; 7, Munirpur; 8, Lodipur and Bákarabad, old settlements; 9, Panáhpur, named by Bahádur Khán a subhedár of the province; 10, Jahángirpur, named after the Emperor Jahángir; 11, Iskandarpur, an old settlement; 12, Ahmadpur, formerly Haibatpur, founded by Haibat Khán, a Gujaráti noble; 13, Asárva, an old settlement; 14, Bibipur, founded in the time of the Gujarát Sultáns by Bibi Máh; 15, Harharpur, an old settlement; 16, Ruppur, ditto; 17, Kálupur, founded by Háji Kálu, one of Mahmud Begada's nobles; 18 Rasulpur, an old settlement; 19, Ghálibpur, ditto; 20, Syedabad or Saraspur, ditto; 21, Mithápur, ditto; 22, Jamálpur, ditto; 23, Sáhibpur, ditto; 24, Nurulláhpur, populated during Farrukh Siyar's reign, by Shaikh Nur Muhammad; 25, Salimpur, an old settlement; 26, Khánpur, ditto; 27, Sarkiváda, ditto; 28, Rasulpur, ditto; 29, Parmápur, ditto; 30, Sárangpur, founded by Malik Sárang, one of Mahmud Begada's nobles; 31, Afzalpur, founded by Afzal Khán, Sultán Muhammad II.'s minister; 32, Begampur, an old settlement; 33, Toghánpur, founded by Malik Toghán; 34, Rájpur, an old settlement; 35, Gomtipur, ditto; 36, Maryampur, ditto; 37, A'lam Ganj, ditto; 38, Kanksiváda, ditto; 39, Lálpuri, ditto; 40, Gopálpuri, ditto; 41, Muazzamabad, ditto; 42, Manjhanpur, founded by Syed Masud, grandson of Sháh A'lam; 43, Bábipur, founded by Safdar Khán Bábi; 44, Sháh Ganj, an old settlement; 45, Navápura, an old settlement; 46, Sultánpur, ditto; 47, Kishvarpur, founded by Kishvardás, Safdar Khán Bábi's minister; 48, Másumabad, founded by Másum Kuli, entitled Shuját Khán; 49, Murád Ganj, founded during the government of Prince Murád Bakhsh; 50, Jamnápur, an old settlement; 51, Begampur also Khajápur, ditto; 52, Rahmatpur or Wahábpur, repopulated by Kázi Wahób during Aurangzeb's reign; 53, Tinpur, an old settlement; 54, Syedpur without the A'stodiya gate, founded by Syed Atáulláh Khán, one of Sultán Ahmad's nobles; 55, Chingizpur, founded by Chingiz Khán Habshi, ruler of Ahmedabad (1571), 56, Kinkspur, an old settlement; 57, Kankálpur, ditto; 58, Bahádurpur, founded by Sultán Bahádur Gujaráti; 59, Akrampur, founded by Akram-ud-din, judge of the province during the reign of Bahádur Sháh son of Aurangzeb; 60, Mufákharpur, founded during the same reign by Abu Mufákhar, brother of the judge of the province; 61, Hirpur, an old settlement; 62, Navápura, ditto; 63, A'limpur, founded by Khudávand Khán or Malik A'lam, son-in-law of Muhammad, son of Ahmad Sháh; 64, Farahpur, also Kázipur, founded by Farah Khán, Kázi of Ahmedabad during Aurangzeb's reign; 65, Sahibabad, founder not known; 66, Nur Ganj, named after Nur Jahán Begam then (1618) staying here with the Emperor Jahángir; 67, Khárádostpoliyah, an old settlement; 68, Zorávarpur named by Jawán Mard Khán Bábi after his son Zorávar Khán at the close of Farrukh Siyar's reign; 69, Rasulabad by Sháh A'lam; 70, Khánándrol, an old settlement, populated till 1733 when Umábai besieged the city; 71, Syed Hámidpura, ditto; 72, Madvi Khán Firozpur, ditto; 73, Hasanpura, ditto; 74, Baklipur, ditto; 75, Irandpur, ditto; 76, Bhávdinpur, ditto; 77, Artiápur, ditto; 78, Khizarpur, ditto; 79, Isanpura, founded by Malik Isan or Nizám-ul-Mulk, one of Begada's nobles; 80, Navábás, founder not known; 81, Khudanpur founded by Malik Khudan, a Gujaráti noble; 82, Behrámpur, an old settlement; 83 Majhuri, ditto; 84, Asával, ditto; 85, Kutbpur, founded during Kutb-ul-A'lam's time; 86, Kásimpur, founded by Mir Kásim in Aurangzeb's reign; 87, Rájupur, by Sháh A'lam; 88, Hánsápur, by Syed Hasan Khán Barha in Aurangzeb's reign; 89, Barejabad, an old settlement; 90, Othmánpur, by Syed Othmán, a follower of Kutb-ul-A'lam; 91, Khánpur, opposite the gate of that name; 92, Naurangpur, founded by Naurang Afghán during the viceroyalty of Shuját Khán; 93, Edalpur, an old Afghán settlement; 94, Firozpur, ditto; 95, Azdarpur, ditto; 96, Salábatpur by Salábat Muhammad Khán Babi; 97, Sharakpur, by Malik-as-Sharak, a slave of Muhammad II. king of Gujarát; Shádmánpur, by Shádmán, son of Khán A'zam Mirza A'ziz Kokaltásh during Akbar's reign; 99, Faridpur Imádulpur, commonly called Mádhulpur, old Afghán settlement; 100, Shaikhpur, founded by Shaikh Rehmatullah; 101, Sultánpur or Mándvi Nimak, an old settlement; 102, Kásimpur, ditto; 103, Nasirabad, ditto; 104, Fatehpur, ditto; 105, Kamál-ud-dinpur, founded by Jawán Mard Khán Bábi and called after his son; 106, Isápur, an old settlement; 107, Rahimpur ditto; 108, Miránpur, ditto; 109, Kochrab, ditto; 110, Pálri.

probably differed greatly in size, some would seem from the reference to them in the Mirát-i-Ahmadi to have been little more than a garden and a mosque. Others were much larger, 'considerable quarters, filled with everything valuable and rare, each almost a city.'[1] In Usmánpur there are said to have been 12,000 shops. Of the names given in the foot-note eight are still (1879) suburbs, thirty are villages of the Daskroi sub-division, and seventy-two are deserted.

Present Suburbs, 1879.

At present there are sixteen suburbs with a total estimated population of 11,741 souls, lodged in 3870 houses. These are, on the north seven, Kágdipith, Uttampura, Mádhavpura, Hatipura, Borradailepura, Fulpura, and Fatehpura; on the east four, Saraspur, Railway Suburb, Rájpur, and Gomtipur; and on the south-east five, Bhavánipura, Raghunáthpura, Kágdápith, Vághriváda, and Kangálpuri. The following are the chief available details:

Kágdipith.

Though it has given its name to a plot of land outside the Sháhápur gate, the Kágdipith suburb does not seem to have been inhabited in 1824, and now has neither houses nor inhabitants. It contains a number of places for pulping rags and paper making, the workers living within the city. Paper making is on the decline, and since the 1875 flood some of the buildings are in ruins.

Uttampura.

Just outside the Delhi gate, to the right of the cantonment road, is Uttampura, founded in 1874 by one Uttamchand, at present a resident of Pátan. It contains fifty-one houses and 170 inhabitants, chiefly day labourers.

Mádhavpura.

A little to the north of Uttampura, Mádhavpura has 318 houses and a population of 679 souls. The municipal import duties have raised Mádhavpura to considerable importance. Most of the houses are used as warehouses, and the suburb has become a station for goods passing into and through the city. Much business is done here, the people who carry it on living mostly in the city. The 1875 floods caused an estimated loss of about £20,000 (Rs. 2,00,000).

Hatipura.

About a quarter of a mile from the Delhi gate and due north of Mádhavpura is Hatipura, founded in 1847 by the well-known Hatising Kesarising. It has sixty-two warehouses, and forty inhabitants, servants and labourers.

Borradailepura.

Close by Hatipura and to its east, between the Delhi and Daryápur gates, is the Borradailepura, founded in 1871 by the Collector, Mr. A. A. Borradaile, for the use of the cultivators of the adjoining lands. It contains sixty-one houses and a population of 170 souls. The head of the Svámi Náráyan sect is at present (1879) building a large rest-house for the use of his followers.

Fulpura.

A little to the south of Borradailepura is Fulpura, founded in 1865 by Fulsha, a member of the Nagar Seth family. It has twenty-seven houses, most of them warehouses, and the population is returned at sixty-seven souls, chiefly servants and warehouse hands.

Fatehpura.

A little further south comes Fatehpura, founded in 1864 by Fatesha, a Shrávak merchant. It contains fifteen warehouses, and forty-four servants and labourers.

---

[1] Bird's Mirát-i-Ahmadi, 311.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Present Suburbs, 1879.
Saraspur.

About a mile and a half east of the Kálupur gate comes Saraspur, the largest of the suburbs, fifty-two acres in area. For municipal purposes a part of Ahmedabad, Saraspur is a distinct walled town with five gates, four large and one small. The walls were built about forty years ago at a cost of £5840 (Rs. 58,400). The total population was in 1872 returned at 5193 souls, and the houses at 1662 in 1879 against 895 in 1824. The inhabitants are chiefly carpenters, blacksmiths, weavers, dyers, and husbandmen. Saraspur is famous for its cart wheels, which are sent in large numbers to all parts of Gujarát and Káthiáwár. Its brocades, and other silk fabrics, are in no way inferior to those of Ahmedabad. It is in a flourishing condition, having a large trade and a market of its own. Outside the walls, and within the limits of the Asárva village, lies a large well-built brick mosque belonging to the Bohora community. Close by are the ruins of the old Sántidás' temple, of whose curious history some details have been given under the head 'Objects of Interest' (p. 285).

Railway Suburb.

To the west of Saraspur, between it and the city wall, is the Railway Suburb, founded in 1863. This ground, between the Sárangpur and Premábhái gates was, under the Land Acquisition Act (X. of 1870), taken for roads, for the sites of rest-houses, and for other necessary buildings. Afterwards more land was added and a large suburb founded. The lands were mapped, and the plots, marked for building sites, were from time to time sold at rates varying from 3*s.* to £1 2*s.* 9*d.* (Rs. 1½ - Rs. 11-6) the square yard. The plots thus sold were, for every 100 yards, subject to the payment of a rent of 2*s.* (Re. 1) in the case of sales on ninety-nine years' lease, and of 4*s.* (Rs. 2) on perpetual transfers. As these sales were made during the time of great wealth, in 1864-65, the proceeds amounted to £24,000 (Rs. 2,40,000). This was spent in making roads, and in building a rest-house, a police station, and the Saraspur over-bridge, in planting roadside trees, and in building a step-well at the station. The suburb thus founded contains 303 houses, 135 of which are of the first class. The population is estimated at 850 souls. The suburb is busy and flourishing. There are two cotton mills, one for spinning and weaving, the other for spinning only, two cotton ginning factories, a small sugar manufactory, warehouses, and other buildings. There are also two rest-houses, one built by Ráo Bahádur Bechardás Ambáidás, C.S.I., and the other by Mr. Maganbhái, both Ahmedabad merchants. A dispensary is under construction by Mr. Ranchhodlál, another native of the city. The roads are broad with a footpath on either side. Part of this suburb, between the Sárangpur and Kálupur gates, covering fifty-five acres has since April 1875 been included in municipal limits. But unlike the lands within the city walls, no taxes are levied as the ground-rents meet the expenditure. The Ahmedabad railway station was built in 1863 at a cost of £11,000 (Rs. 1,10,000). As in other Gujarát stations, the chief object was to get the largest possible covered area at the least cost. The city is connected with the station by made roads from the Premábhái, Kálupur, Panchkuva, Sárangpur, Ráypur, and A'stodiya gates. An excellent road goes all the way from the A'stodiya in the south-east to the Premábhái gate in the north-east and there joins the road connecting the railway station with the cantonment.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Present Suburbs, 1879.

About a mile south of Saraspur, and the same distance east of the Ráypur gate, is the suburb of Rájpur with 189 houses and an estimated population of 600 souls. Its chief industry is the weaving of coarse cotton cloth. A Jain temple, on Sundays much visited by Ahmedabad Shrávaks, and Bibiji's mosque, in good repair and said to date from the times of early Musalmán rule, are the chief buildings.

A little to the east is Gomtipur, with 825 houses and a population of 2613 souls, chiefly well to do silk weavers and dyers, and gold and silver thread makers. Every year in *Kártak* (November) a large fair is held in honour of the god Narsinh.

Bhavánipura.

About a mile west of Gomtipur comes the south-eastern group of Ahmedabad suburbs. Of these the one most to the east is Bhavánipura with sixty-three houses and 190 inhabitants.

Raghunáthpura.

West of Bhavánipura, and outside the Ráypur gate, is Raghunáthpura, with 135 houses and 515 inhabitants, most of them labourers.

Kágdápith.

A little to the west of Raghunáthpura is, outside the A'stodiya gate, the walled enclosure of Kágdápith on the left of the Sháh A'lam road. This was once the site of the Vithalpura suburb. The walled enclosure surrounding about four acres of land, originally a rest-house, has since 1866-67 been used partly as a leper hospital and partly as a ward for chance cholera and smallpox cases. This suburb was for a short time used as a grain market. But it was not found suitable, and the grain market has been taken back to its old quarters near the Jáma mosque.

Vághriváda.

Though entered separately in the survey registers, Vághriváda forms the south part of Raghunáthpura. It has 120 houses and 470 inhabitants, chiefly brickmakers and labourers.

Kangálpuri.

South of Vághriváda, Kangálpuri, or the poor suburb, is a hamlet of thirty-nine huts, and 140 people almost all day labourers.

Cantonment.

In a well-wooded park-like plain, about three and a half miles north-east of the city, on a site chosen by Sir John Malcolm in 1830, the cantonment[1] is reached by a well watered road[2] running through splendid rows of very old and fine trees. The camp faces the left or east bank of the river, with the lines of the two regiments of native infantry to the front, and the line of the European troops on the left flank and rear. The camp, the head quarter station of the northern division, is commanded by a Major-General with a staff of an Assistant Adjutant General, an Assistant Quarter-master General, a Deputy Surgeon General, and a Staff Surgeon. The troops are one half battery of Royal Artillery, one company of European

---

[1] The cantonment details have been kindly supplied by the Quarter-master General of the Bombay Army. On the cession of Ahmedabad in 1817 the troops were first lodged in the Gáikwar's *haveli*, the present arsenal. There they remained for some years when the lines were removed to a spot, a couple of miles south of the city, where they stood till, in 1832-33, the present cantonment was established

[2] The municipality pays a contribution of £210 (Rs. 2100) towards watering the camp and Sháhi Bag roads.

Chapter XIV.
Places of Interest.
AHMEDABAD.
Cantonment.

Infantry, one Native Infantry Regiment, and a depôt. The total population of 4682 souls is lodged in 992 houses. Of these 2799 with 357 houses are within the military, and 1883 with 635 houses within the civil limits of the cantonment. Sanitary arrangements are under the control of a cantonment committee. There are five hospitals, three military, one staff, and one lock hospital. Besides what is drawn from the river, many wells in the lines yield good and plentiful water. The lines are airy, well built, and for the most part well shaded. The natural surface drainage answers all purposes. Conservancy is well attended to, the streets and open spaces in front of the huts being kept clean. The cantonment police is under the management of a cantonment magistrate, who also discharges all magisterial duties in the camp and market, *bazár*. The market is well stocked with articles in demand among the troops, and spirit shops are under control according to cantonment rules.

The chief buildings are, for the Artillery, besides officers' messes and out-houses, three barracks, each able to hold forty-four men and two serjeants. These barracks with stone-paved floors, brick masonry walls, teakwood doors and windows, and double-tiled roofs with clerestory ventilators, were begun in May 1875 and finished in March 1879, at a total cost of £19,647 (Rs. 1,96,470). Besides the barracks there are three quarters for married soldiers and three quarters for staff serjeants. For the European Infantry, there are four barracks, one for forty-four men and two serjeants, one for forty-eight men and two serjeants, and two for sixty-one men and four serjeants each, and two quarters for married soldiers. The first two of the four European Infantry barracks, were begun in February 1876 and finished in March 1879 at a cost of £13,307 (Rs. 1,33,070). For the use of officers there are forty-four dwellings with yearly rents varying from £120 (Rs. 1200) to £25 (Rs. 250) and averaging £61 (Rs. 610).

ARNEJ.

Arnej in the Dholka sub-division, about fifteen miles south-west of the town of Dholka, though now little more than a village, was formerly the meeting of many streams of traffic, from Rádhanpur, Kadi, Pátan, Ahmedabad, and Kaira, to Dholera and Káthiáwár. The village revenues, presented by Ḍámáji Gáikwár, have by the British Government been continued to the temple of Bhut Bhaváni. Under the crop-share, *bhágbatái*, system, collected by an accountant and headman, the village revenues are managed by a committee, *panch*, appointed by Government consisting of the headman, his assistant, and a Dholka Vánia. Part of the revenue is spent in keeping a food house, *sadávart*, where doles of uncooked grain are daily given to travellers, chiefly religious beggars, *sádhus*, and Márwádi labourers. The village shepherds, *Bharváds*, are bound to supply the pilgrims with cowdung fuel.

BARVA'LA.

Barva'la, a walled town, in north latitude 22° 9′, and east longitude 71° 56′, on the river Utávli, about twenty-five miles south of Dhandhuka, had in 1872 a population of 5813 souls and 1538 houses. To the north the country is rich, and to the south bleak and barren. Except its fine encircling wall, built by a manager of the Limbdi state there is little noteworthy in the town. It is one of

the villages that in the disturbed times of the eighteenth century sought protection from one of the stronger neighbouring chiefs. It is provided with a travellers' bungalow.

Ba'vlia'ri. See Dholera. BA'VLIA'RI.

Bhadia'd in the Dhandhuka sub-division two miles north-west of Dholera has the shrine of a Musalmán, known as Pir Bhadiádia, or the Bhadiád saint. He is said to have been a Bukhári Syed, Muhammad Sháh by name, who about 600 years ago, coming from Uchh in the Panjáb, heard that a Gujarát chief was in the habit of never breaking his fast till he had killed a Musalmán and, with his victim's blood, had marked his brow. With a band of followers the Syed went against the chief and with the loss of his own life defeated and killed him. Over his tomb, in after-times visited by Sháh A'lam, and other of the Bokhári Syeds, a Nawáb of Cambay built the present plain square domed mausoleum. The saint who is the head of the sect of Mehmudshái Momnás is held in reverence by some low class Hindus. In the mausoleum hangs a fifty-pound iron chain formerly used in ordeals. With it round his neck the accused walked seven steps. If at the seventh step the chain broke he was innocent, if it did not break he was guilty. BHADIA'D.

Bhimna'th, a village in the Dhandhuka sub-division about ten miles south-west of Dhandhuka, has a temple of Mahádev held in high local esteem. The story is, that when the Pándavs (1400 B.C.) came to Gujarát, Arjun was careful never to break his fast till he had worshipped Mahádev. Coming to this, a forest and shrineless tract, Bhim, fearing lest his brother should suffer from too long a fast, set up in a thicket a ling-shaped stone and strewing flowers, sent Arjun word that he had found a Mahádev's shrine. Arjun worshipped, and was afterwards laughed at, and told it was no real shrine. The brothers with their mother then went to the spot and Bhim carelessly striking the stone, milk gushed out. Since then the god has been worshipped as Bhimnáth Mahádev. The place is said to have first been made popular by Mádhavgir an ascetic in 1479. But it has probably risen to consequence since the weakening of Musalmán power in Gujarát (1707).[1] The shrine is not roofed, only walled round. It has lately been adorned with a marble pavement, a marble bullock, *nandi,* and two elephants. Several villages have, by different Hindu chiefs, been given to the shrine and it is now rich, drawing, besides from chance offerings, a yearly income of about £3000 (Rs. 30,000). Most of this money is spent on feeding Bráhmans of whom on cocoanut day sometimes as many as 10,000 attend. The belief that after being at Dwárka, Bhimnáth should be visited adds greatly to the number of its pilgrims. BHIMNA'TH.

Dhandhuka, a municipal town of, in 1872, 9782 inhabitants and the head-quarters of the Dhandhuka sub-division, lies on the right bank of the Bhádhar in north latitude 22° 23′ and east longitude 72° 2′, sixty two miles south-west of Ahmedabad. In a dull and, DHANDHUKA.

[1] There have been only ten high priests, *Mahants,* and as the office is elective this would probably not carry the date much beyond the 18th century.

Chapter XIV.
Places of Interest.

DHANDHUKA.

except to the north, treeless plain, the town of Dhandhuka is from without mean in appearance, and inside is modern and uninteresting. Its open position, unsheltered either from hot or cold winds, makes its climate trying. With little help from the Bhádhar, whose stream is generally dry, the Dhandhuka water-supply is confined to a few ponds to the west and south of the town and three large wells. Dhandhuka is said to have been founded by, and to take its name from, Dhan or Dhand Mair,[1] or rather Mehd, the second of the thirteen sons of the Koli chief Sonang Mehd who in early times came into Gujarát from Sind.[2] Having no son, Dhan Mehd is said to have given the town as a Krishna, or lasting, gift to a party of 400 Bráhman refugees from the wrath of Ebhal Wálo chief of Wala.[3] In the twelfth century Dhandhuka became famous as the birth-place of the great Jain teacher Hemchandra, a Modh Vánia by caste, and in his honour King Kumár Pál (1143-1174) raised over his birth-place a temple known as the cradle-vihár.[4] Under the Musalmáns and Maráthás Dhandhuka kept its position as a country town, its fortune being almost always linked with the fortune of Dholka. Along with Dholka it was ceded to the British in 1802.

Of 9782 its 1872 population, 6115 were Hindus, 3638 Musalmáns, and twenty-nine came under the head 'Others'. The three chief classes are Bohorás 'a hard, quarrelsome, and obstinate set,' Modh Vániás, and Válam Bráhmans. The making of coarse cloth, pottery, carpentery, and smith's work are the chief industries. But its craftsmen have no special name and it is a place of little trade. As the chief town of a sub-division, Dhandhuka has a mámlatdár's, a chief constable's, and a subordinate judge's office. It is also provided with a post office, a dispensary, and a travellers' bungalow. The municipal income was, in 1877-78, £552 (Rs. 5520) or about 1*s.* 1*d.* per head of the population. There are five vernacular Government schools, four for boys and one for girls. Its only object of interest is the Multán lake, whose fine masonry walls are now in ruins and its water unfit to drink.

DHOLERA.
Appearance.

Dholera, north latitude 22° 15′, and east longitude 72° 14′, one of the chief cotton marts in the Cambay Gulf, had in 1872 a population of 12,468 souls. Though called a port, the town of Dholera is about twelve miles from the sea, and though the Bhádhar or Dholera creek on which it stands, is said, a hundred years ago, to have been open for boats up to Dholera, it has for the last fifty years been silted up, and the trade passes through two ports, Khun, about five miles lower down on the same creek and Bávliári on an inlet of the sea, about sixteen miles south. The town itself, at a

---

1 According to another account the town is said to be called after Shri Dhandhika of the Solanki tribe who married the daughter of Mul Ráj's predecessor. As. Res. IX. 187.

2 Rás Mála, 79. No date is given.

3 Rás Mála, 244. Ebhal Wálo from whom the Bráhmans fled to Dhandhuka, flourished during the time of Ránáji son of Sejakji under whom the Gohels driven south by the Ráthores came into Gujarát.

4 Rás Mála, 145 and 152.

distance rather handsome with spires and high buildings, lies in a barren salt waste, kneedeep in mud during the rains and at other times thick with dust. Inside, the streets are close and narrow, the town without any point of beauty except its reservoir, the *Gám Taláv*, or village pond, masonry-built on three sides, and surrounded by handsome temples especially one belonging to the Svámi Náráyan sect. With a biting cold wind in January and February and scorching blasts in March, April and May, the climate of Dholera is sickly and unpleasant.

Of the 1872 population 12,468 souls, 10,845 or 86·98 per cent were Hindus, 1608 Musalmáns, and fifteen came under the head 'Others.' Of Hindus the chief classes are the Churásama Girásiás the proprietors of the village, split into two rival factions. Besides these are many Vániás and Luvánás, prosperous and pushing traders. Of craftsmen Dholera has for some time been famous for its carpenters and wood-carvers. In revenue matters Dholera is under the Dhandhuka mámlatdár. For police purposes there is a local post, *thána*, under a *Thánádár* with second class magisterial powers, and a chief constable. Dholera contains three schools, a post office, and a Government telegraph office. The road from the town to the shipping place at Khun, a distance of five miles, lies along a sand embankment, raised out of the mud above high water level.[1] This is difficult to pass, as the line of road has to change when the creek shifts, and as for repairs there is no material stronger than sand. At the shipping place there is a pillar light; but no artificial conveniences for loading and unloading cargo, as the high mud banks give all the facilities of a made wharf. Here, about seven miles from the mouth of the creek, the springs vary from ten to seven feet, the boats being left dry on the ebb of each tide. The passage down the creek, for several years so blocked with silt that boats could not pass out from the 5th to the 11th of every half of the month, has, by the flood of the past (1878) rains, been so cleared that laden boats can sail on the flood of any tide during any day in the month. At the mouth of the creek the tide varies from thirty to fifteen feet. The strength with which it runs, and a long sand bank that, dry at low water, stretches four or five miles into the Gulf, make the entrance to the creek difficult. A boat nearing the creek and failing to make it on the flood must about ship on the ebb and anchor outside of the bank. If not it runs the risk of becoming a complete wreck. Even when anchored on a good bottom, few boats that are not very skilfully handled, escape being capsized by the rush of the bore over the bank. The mouth of the creek lies about thirty miles north of Bhávnagar and twenty north of Bávliári. But the navigable course is sixty miles from the former and thirty-five from the latter. At the entrance of the creek is a light-house. Bávliári, the other Dholera shipping place, is reached by a difficult tract liable to flooding and not passable till long after the dry weather has set in. The shipping place is very small at high tides; not more than 150 yards remain

Shipping.

[1] The tramway constructed in 1850 at a cost of about £5000 (Rs. 50,000) is not now (1879) at work.

Chapter XIV.
Places of Interest.
DHOLERA.

dry for storing goods. There is no made landing place. But the banks are steep and well suited for loading and unloading cargo. The basin, dry at low tide, has at the highest spring a depth of about twelve feet. The creek offers no difficulties. At its entrance there is considerable shelter and at the lowest tide depth to float the largest boat in the trade. It can easily be made by boats running from Bombay.[1]

History.

Dholera, or Ráha Taláv, is the first part of the Ahmedabad district that came into British possession. To save themselves from the encroachments of the Bhávnagar chief, the proprietors of Dholera, on condition of receiving half its revenue, on the 11th June 1802 made it over to the British. It was then a village of 300 houses with no trade, its people in fear and trembling growing grain enough to keep them alive. At first, progress was slow, but by 1813 there was a considerable increase of trade. A few years later (1817) the Dholera creek silted up and goods had to be loaded and unloaded at Bávliári. The change worked well, Bávliári being used only as a shipping place, and Dholera growing in size. The trade of the port increased, and in 1850 after several changes Khun was fixed on as the best shipping place on the Dholera creek. In 1848 Dholera had 6807 inhabitants, some substantial houses were being built, and one or two handsome temples were nearly finished. The next twenty years was a time of rapid progress ending, during the American war (1862-1864), by making Dholera the chief cotton port in Gujarát. During the ten years ending 1863 the total value of the trade of the port rose from £975,669 (Rs. 97,56,690) to £4,783,326 (Rs. 4,78,33,260). Since 1863 trade has again declined. Besides the falling off, due to the close of the American war, two local causes have been at work, taking from Dholera part of the trade that formerly enriched it. These are, in 1872 the extension to Wadhwán of the Ahmedabad railway, and the centring in Viramgám of much of the traffic that used to pass by sea. The other cause is the keen rivalry of Bhávnagar which has attracted to itself a much larger share than formerly of the seaboard trade. The trade figures during the five years (1866-1870) after the effect of the American war had passed over show a slight rise in the value of the total trade from £1,293,173 (Rs. 1,29,31,730) in 1866 to £1,707,357 (Rs. 1,70,73,570) in 1870. Since 1870 the fall has been rapid from £1,583,579 (Rs. 1,58,35,790) in 1871 to £586,591 (Rs. 58,65,910) in 1878. The chief details of the last season's trade are: Of exports, cotton of the value of £386,376 (Rs. 38,63,760); grain worth £1891 (Rs. 18,910); and of imports, grain and seeds worth £85,318 (Rs. 8,53,180); cocoanuts and dry fruits, £28,777 (Rs. 2,87,770); sugar and molasses, £37,474 (Rs. 3,74,740); metal, £10,743 (Rs. 1,07,430); piece goods, £12,315 (Rs. 1,23,150); timber, £4889 (Rs. 48,890); condiments, £3705 (Rs. 37,050). Except occasional shipments of grain and oil to Broach and Surat, the exports go almost entirely to Bombay. Of the imports, piece goods, grain, sugar, spices, hardware, cocoanuts, timber, and dates come from Bombay; timber and

Trade.

[1] The shipping details have been kindly supplied by Mr. A. Whittle, of Messrs. Greaves, Cotton, and Company.

Chapter XIV.
Places of Interest.

DHOLERA.
Trade.

molasses from Bulsár; timber, bamboos, and dry fish from Dáhánu and Daman in the Konkan; timber from Broach; cocoanuts and spices from the Malabar coast; and dates and dry fruits from Muscat. From Dholera most of the imports go to Káthiáwár, north Gujarát, Márwár, and Rajputána. Besides two houses of European merchants the cotton trade is chiefly in the hands of natives of Bombay, chiefly Shrávak Vániás, and Bhátiás, Ahmedabad and Visnagar Shrávaks and Kanbis, and Káthiáwár Hindus, most of them Shrávaks and a few Meshri-Vániás and Kanbis. The timber trade is chiefly in the hands of Luhánás and Bhátiás; the Muscat traders are Musalmáns of the Meman sect. The cotton season, still the mainstay of the port, begins in November, when the balance of the old crop is sent off, the export lasting till the end of December. The new crop, grown in the north-east of Káthiáwár, begins to come forward in January, the *khari mosam*, or real time, lasting from the 10th April to the 5th May. After that arrivals slacken and quality falls off, till the first fall of rain (June 5-20) closes business. Of late the Dholera cotton merchants, both Europeans and Bombay natives, have begun to buy cotton direct from the growers. But the usual practice is to buy either from a large dealer or from a small middleman who has bought from the grower. Most of the cotton is both ginned and pressed in Dholera. There are forty Macarthy's roller gins worked by steam power and thirty-six presses, two of them full, worked by steam, the rest half presses worked by hand. At present the cotton trade is much depressed, the value of the exports having fallen from £3,770,410 in 1863 to £386,376 in 1878. In former days brokers and clerks thronged the clearing house, showing a surprising capacity for business and knowledge of discounting and exchange. Now, so far from seeking credit, the few bankers that cling to Dholera can scarcely find an outlet for their reduced capital. Dholera is not a municipal town. Its conservancy and sanitary charges are met from the '*Dharam Talâv*' fund created about the year 1818 for a supply of water along the road to Dholera. This fund yielded in 1878 a revenue of £1050 (Rs. 10,500).

DHOLKA.
Appearance.

Dholka, a municipal town, the head quarters of the sub-division of the same name, with, in 1872, a population of 20,854 souls and 5985 houses and a municipal income, in 1877-78, of £1477 (Rs. 14,770), or about 1*s.* 5*d.* per head of the population, lies in north latitude 22° 44′, and east longitude 72° 28′, twenty-two miles to the south-west of Ahmedabad. In a well tilled and well wooded plain, for about two miles broken at intervals by mounds from ten to thirty feet high and by the remains of rich mosques and gardens, Dholka a mile and a half long by three-quarters of a mile broad, is irregularly fortified by a mud wall four miles in circumference. On the Sábarmati, on the straight line between north Gujarát and the Gulf of Cambay, as well as on the chief land route between Gujarát and Káthiáwár, Dholka is probably one of the oldest cities in Gujarát, and has always maintained its position as an important country town and trade centre.

Dholka is supposed to stand on the site of Virátpur, or Matsyanagar, which in their wanderings the Pándavs (1400 B.C.) found governed

Chapter XIV.
Places of Interest.

DHOLKA.
History.

by queen Sudishva of the Kaiyo or Bhil race. Her brother Kichak Kaiyo, a prince of great power, was, according to the story, slain for an attempt on the chastity of Draupadi.[1] Here too in the second century after Christ (144), Kanaksen a prince of the race of the sun is said to have settled.[2] At the close of the eleventh century the town was by Minal Devi, the mother of Sidh Ráj (1094-1143) of Anhilváda, adorned with a lake still its chief ornament. In the 12th century Al Idrisi mentions Dulaka as one of the chief trading towns in Gujarát.[3] Early in the thirteenth century it would seem to have been called Dhavalgad and to have been held by Vir Dhaval the founder of the Vághela dynasty whose territories included the lands of Godhra and Lát.[4] Under the Musalmán kings and viceroys, though never a place of great consequence, Dholka is often mentioned as a town and fort, the quarters of a local governor, and its remains show that at one time it was adorned by many beautiful Musalmán buildings.[5] In the eighteenth century troubles, Dholka seems to have been taken by the Maráthás in 1736; to have been recovered by the Viceroy in 1741; to have again fallen into the Gáikwár's hands in 1757; and to have remained with him till its cession to the British in 1804.[6] It suffered much from the 1813 famine, and when surveyed in 1820-1822 showed few signs of returning prosperity.

Of 20,854, its total 1872 population, 13,993 were Hindus, 6859 Musalmáns, and two came under the head 'Others.' The greater part of the Musalmán population are *kasbátis*, literally townsmen, the descendants of soldiers of fortune, who were settled in Dholka as a guard against the inroads of Káthiáwár freebooters. Of their rise to power in the eighteenth century, and since then of their decline to poverty, details have been given under the head 'Tálukdárs' (p. 179).

Trade.

The chief industry in Dholka is the weaving of women's robes, *sádis*. These, considered about the best in the Ahmedabad district and much worn by low and middle class Hindus and Musalmáns, are woven by Hindu Khatris and Musalmán Momnás and Kasbátis. Some coarse, *khádi*, cloth is also made, and there is a considerable manufacture of pottery and wooden bracelets and of iron and brass pots and tools. In the beginning of the present century there was an important trade chiefly in cloth for export to the Persian Gulf and Arabia. This trade fell off during the 1813 famine and pestilence, and was not revived.[7] At present there pass west to Káthiáwár and the Gulf ports, cloth, millet, rice, and pulse from Ahmedabad, poppy seed and sesamum from the Gáikwár's Kadi sub-division, and tobacco from Kaira. The local exports are cloth, molasses, and fruit, chiefly pomegranates and guavas.[8]

---

1 Rás Mála, 78. 2 Rás Mála, 16. 3 Elliot's History, I. 87.
4 Rás Mála, 201.
5 Bird, Mirát-i-Ahmadi, 117, says that when Gujarát was handed over to Akbar, Dholka was the centre of 615 villages yielding a revenue of £160,000 (160,000,000 *tankhás*). Other references are, Bird, 259, 303, 325, 339, 360, 376. Ferishta mentions the fort of Dholka. Briggs, I. 146.
6 Bom. Gov. Sel., New Series, XXXIX. I. 14.
7 Bom. Gov. Sel., New Series, XI. 46.
8 Mr. Lely, C.S.

Chapter XIV.
Places of Interest.

DHOLKA.

As the chief town of the sub-division Dholka has a mámlatdár's, a chief constable's, and a subordinate judge's office. In the middle of the market place is a municipal building with a clock tower, a room for the municipal secretary, and a library and reading-room. There is one Anglo-vernacular and four vernacular schools, a dispensary, a travellers' bungalow, and three rest-houses. The travellers' bungalow, kept up from local funds, is suited to the wants of Europeans. Of the three rest-houses, one, the Government rest-house on the Kaira road near the travellers' bungalow, is from the loneliness of its site little used. A second much handsomer building to the west of the town, connected with a Hindu temple, is used only by Hindus. The third to the north, with room for about 100 travellers, built by a rich Shrávak, is open to all except the lowest classes. Daily fees varying according to the size of the travellers' party from ½*d.* to ¾*d.* (2-6 *pies*) are collected by a man appointed by the aldermen of the Shrávak community who keep the building in repair, if necessary supplying money from the common funds.

Remains.

The chief object of interest near Dholka is the Maláv lake, built about the close of the eleventh century by Minal Devi, widow of Karan Rája and mother of the famous Sidh Ráj.[1] It is about 400 yards in diameter, surrounded by a finely-carved stone wall and flights of stone steps. In the middle of the lake are the remains of a building, connected with the shore by a light and graceful wooden bridge, supported on sculptured stone piers. The platform and roadway are (1857) mostly gone, but the piers remain entire. All round (1857)[2] are fine rows and groups of magnificent trees. Besides scattered remains there are two beautiful mosques of almost the same size and plan, each about 150 feet square with three arches in the screen wall and five domes in the mosque front.[3] Of Hindu temples the chief is the Nágeshvar or Chandreshvar Mahádev, built in 1751 (1807 S.) by Antáji Rív, an officer of the Gáikwár's. The revenues of the village of Rájpur, assigned in 1758 (1814 S.) by the Gáikwár, are still set apart for its support.[4]

GOGHA.

Appearance.

Gogha, north latitude 21° 39′, east longitude 72° 15′, a port and municipal town with, in 1872, a population of 9571 souls, lies in the south-east corner of Káthiáwár, about forty miles from the head of the Cambay Gulf. Its roadstead about a quarter of a mile from the shore, sheltered from the south-west by an outward bend of the land and on the south by the island of Piram, with a soft muddy bottom, and a sandy beach, is at all times a good anchorage. At the town is a small creek or natural basin dry at low tide but at high water offering an entrance to small craft.[5]

---

1 Rás Mála, 83. Mr. Forbes would seem to look on Maláv as short for Minal-taláv.

2 Of the building of the lake the story is told that a courtezan's house jutting out broke the line of its eastern shore. The owner, though offered a large sum, refused to leave, and the queen unwilling to use force let the house stand. Her moderation somewhat marred the shape of the work but gained for the queen a name still kept fresh in the proverb 'Would you see justice go to the Maláv.' Rás Mála, 83.

3 Fergusson's Hist. of Architecture, III. 537.

4 Mr. Lely, C.S.

5 The rise and fall of the tides is in the springs from 30 to 33 feet. Horsburgh's Directory, 284.

Chapter XIV.
Places of Interest.

GOGHA.

Appearance.

The beach of sand and gravel is clean and sloping with, on the north, a fringe of mangrove bushes. Above high water mark the shore is covered with tombs, most of them dating from the times of Musalmán rule (1390-1764). The country round lies low, in parts covered with fresh water marshes and ponds and in others overflowed at high tide from the south-east and west branches of the creek. The rock is sandstone passing into a very rough conglomerate full of fossil bones. The surface is in parts covered with sea shells and gravel, in others with patches of black and yellow soil.[1] From the sea, its large regular houses, beautiful trees, and dark shapely stone walls give Gogha a pretty, almost a striking appearance. The landing place, though little has been done for it, is safe and easy. The town, about three-quarters of a mile long and half a mile broad, is circled by well kept stone walls about three miles round, with, besides some small little-used gates, two main gateways, one in the west to Bhávnagar and Ahmedabad, the other in the south to the coast villages. The houses facing the harbour are large and handsome, chiefly built by Nágar Bráhmans, the rest are of stone and mud the better sort pointed with lime or plastered. The streets are narrow but in good order. The town is well drained, and on the whole healthy, with a good equable climate, never very cold and seldom rising above 96°.

History.

Gogha[2] first appears as the port of Gundigad, a place of consequence in the Valabhi kingdom (480-720).[3] Under Anhilváda rule (746-1297), except as a nursery for seamen, Gogha was not a place of any note.[4] One of the earliest mentions of the town is by Friar Jordanus, who, in 1321, passing north through Thána and Broach or as he writes it *Parocco*, stayed at 'Caga'. Of the place he has left no details.[5] At this time Gogha is said to have been in the hands of Musalmán soldiers of fortune,[6] from whom, a few years later (1325), Mokhráji, the Gohel chief of Umrála,[7] took it and with the island of Piram made it his head-quarters. As ruler of Piram,

---

1 A well-bore in 1836 showed many layers of conglomerate, a 35 feet bed of sandstone, and, as deep as 360 feet, stiff black and blue clay without water. Trans. Bom. Geo. Soc. XIII. 22.

2 M. Vivien de St. Martin, Geographie Grecque et Latine, 245, would make Gogha the Astacampra of Ptolemy and the Periplus. But Gogha's claim seems no better than that of Talája, Gopnáth, and other places between Diu and Cambay. The name Gogha has (Trans. Bom. Geo. Soc. VII. 103 [1846]) been traced to the famous Rajput warrior and hero Gogobáva (Tod's Rajasthán, II. 413. ed. 1873). A more likely derivation is from the shell, *goghala*, common along the coast. Ind. Ant. III. 278.

3 Ind. Ant. III. 278. Perhaps Gundigad, and not Gandevi, is the Anhilváda (746-1290) port Gandaba (see Rás Mála, 189). In the sixteenth century Gundilakyat (Koliac ?) was a place of interest: Gladwin's Ain-i-Akbari, II. 67. In Mandelslo's map (1638) of the Cambay Gulf it is entered Gundim (Voyages, 100). It is still known as Gundikoliák from a village close by.

4 It is not mentioned by the Arab travellers (Elliot's Hist. I. 1-99) of that time nor in Mr. Forbes' list of Anhilváda ports. Rás Mála, 189. According to one account the Sonária lake was built by Sidh Ráj (1094-1143). Rás Mála, 197. The story seems without support, and the credit of Sidh Ráj as a builder is so universal in Gujarát, that by itself the statement carries little weight.

5 Yule's Cathay, I. 228.

6 Major Watson's Bhávnagar, 20.

7 Ind. Ant. III. 280. Rás Mála, 247. Col. Tod would put the capture of Gogha about 100 years earlier. Western India, 258-286.

Mokhráji levied toll from all ships passing up the Gulf. His exactions came to the knowledge of the Emperor Muhammad Tughlik (1325-1351), then quelling a revolt in Gujarát, and, in 1347, Gogha was taken, Mokhráji killed, and the Piram fort destroyed.[1] The Emperor, satisfied with the destruction of Piram, left Gogha, at this time 'a great city with large markets,' in the hands of Dungarji, Mokhráji's son.[2] For about fifty years the Gohels held Gogha. Near the close of the century (1390) they were forced to pay tribute to Muzaffar Khán the founder of the Ahmedabad dynasty.[3] In the fifteenth century, under the powerful Ahmedabad kings, the Gohels, though they kept their title of Gogha chiefs, retired to Umrála. At this time Gogha was probably under a Musalmán governor.[4] At the beginning of the sixteenth century (1503) it was entirely a Musalmán town 'of great traffic in a fat and wealthy land.'[5] Ten years later (1513), it was 'a very large town and a good port dealing in merchandize of all kinds and loading ships for Malabar and Aden.'[6] In the struggles for mastery at sea between the Gujarát kings and the Portuguese. (1507-1538) Gogha suffered. A strong and populous place of great trade surrounded by walls of brown stone, it was attacked and burnt by the Portuguese in 1531,[7] and again, as it was beginning to recover, in 1546. Towards the close of the sixteenth century with the decay of Portuguese power Gogha seems to have regained its trade.

When taken in 1591 [8] by Khán-i-Azam Mirza Kokaltásh, the

---

1 Watson's Hist. of Gujarát, 26. Mokhráji is a great hero with the Gujarát bards. Of the cause of his defeat one story is, that a Musalmán trader, overtaken by the stormy season, left in Mokhráji's keeping seven shiploads of earth. The earth was stored near a blacksmith's shop and some leaking into his fire was found to yield gold. Mokhráji was told, used the gold dust, and replaced it with earth. On his return the merchant, finding no redress, complained to the Emperor. Ind. Ant. III. 280, 281.

2 Rás Mála, 289. Yule's Cathay, II. 415. Lee's Ibn Batuta, 164. The description of the town is from Ibn Batuta who is supposed to have passed through Gujarát in 1342. Though the dates do not agree, the details that Piram, *Bairam*, was without inhabitants since its capture by the Muhammadans, and that Gogha, *Kuka*, was under a pagan Dungarji Gohel, *Dunkul*, seem to show that Ibn Batuta was at Gogha after Mokhráji's defeat. The want of any reference to it in the detailed account of his campaign in Gujarát (1346-1350), shows how little the Emperor thought of crushing Mokhraji. Tárikh-i-Firoz Sháhi : Elliot, III. 256, 265. The family of the present Kázi of Gogha is said to owe its appointment to Muhammad Tughlik.

3 Rás Mála, 289. Dungarji was followed by his son Viyoji and Viyoji by Kánji who died leaving a minor Sárangji. When the Musalmáns came, Rámji, Sárangji's uncle and guardian, agreed to pay tribute and giving Sárangji as hostage hoped to keep for himself the chiefship. But Sárangji came back and the heads of the tribe taking his side, Rámji was forced to content himself with a small share. Muzaffar Khán's name was found in an inscription at Gogha. The date is puzzling 1378 (10 Rejb 777) or twelve years earlier than, according to the received account, Muzaffar came to Gujarát. But of the person Zafar Khán, son of Vajé-ul-mulk, there seems no doubt. Tod's Western India, 251.

4 Rás Mála, 289, 347. The names of the Umrála chiefs are, Sárangji, 1420; Shivdás, 1445; Jetáji, 1470; Rámdásji, 1500; Sartanji, 1535; and Visoji, 1570, who took Sihor, and made it his capital. Major Watson's Bhávnagar, 22.

5 Badger's Varthema, 92. 6 Stanley's Barbosa, 63.

7 Faria de Souza in Kerr, VI. 223. The walls were so well made that Faria thought they must be the work of the Chinese. The Chinese traded to Diu, Broach, and other Cambay Gulf ports in the seventh, eighth, and twelfth centuries but there seems to be no evidence that they settled in Gujarát. See Yule's Cathay, I. LXXVIII LXXIX.

8 Akbar-náma in Elliot's History, VI. 90. Bird's Mirát-i-Ahmadi, 416.

Chapter XIV.
Places of Interest.
GOGHA.
History.

seventh of Akbar's viceroys, Gogha was a large well built port with many merchants and ships whose cargoes went in small boats to Cambay.[1] It was reckoned part of Soreth and, besides port dues, yielded a yearly revenue of £1666 (666,560 *dáms*). In 1612, on the advice of Khojáh Násar the Surat Governor, who praised its fine harbour and its trade with Cambay, the English gained leave to settle at Gogha.[2] But the agent, Whittington, found it a poor town and no regular factory seems to have been established.[3] Two years later (1614), the Portuguese a third time destroyed Gogha, burning 120 trading boats and several ships, one of them the Rahimi, the great 1500 ton pilgrim ship.[4] This was the last show of Portuguese power. The English were now masters of the sea. With the Dutch, by raising Surat to be the chief port of Gujarát, the English injured the trade of the Cambay ports. Still during the seventeenth and for a few years of the eighteenth centuries, Gogha was the centre of a considerable traffic. The Portuguese boats met in its road and were convoyed to Goa by war-ships; and vessels belonging to the native merchants of Ahmedabad and Cambay sailed from Gogha to south India and Arabia. Protected on the sea face by a stone fortification, and later on sheltered all round by a mud wall, with a local governor and a military force, Gogha had a large number of traders, weavers, and sailors.[5]

The eighteenth century was a time of decay. Trade fell off, and Gogha, handed from one Musalmán noble to another (1730-1751), taken by the Peshwa (1751-1755), recovered by the Nawáb of Cambay (1755), and again (1764) taken by the Peshwa, was, under his careless and faithless managers, little able to compete with its pushing rival Bhávnagar.[6] In 1803 when it came under British management the trade of Gogha was almost gone.[7] In 1810 things were a little better.

---

1 Gladwin's Ain-i-Akbari, II. 64. Diu and Cambay are the only ports mentioned by the European travellers of this time (1583-1588). See Fitch in Pinkerton, IX. 408 and Cæsar Frederick in Haklyt, II. 344.

2 Best (21st Oct. 1612) got an agreement for planting a factory at Gogha. Kerr, IX. 100. See Roe in Kerr, IX. 359.

3 Kerr, IX. 124. Mandelslo (1638) makes no mention of an English factory at Gogha, nor has Anderson in his 'Western India' any reference to one.

4 Kerr, IX. 77; Orme's Historical Fragments, 346.

5 Mandelslo (1638); the Portuguese war ships come here and convoy the trading boats to Goa, Voyages, 153; Baldæus (1660), a safe rather shallow road where Ahmedabad and Cambay merchants have their ships careened and victualled before going to Arabia and south India, also a station for Portuguese convoys, Churchill's Travels, III. 514; Thevenot (1666), a small town with a number of traders and seamen, Voyages, V. 94: Ogilby (1680) quotes chiefly from Mandelslo and Baldæus, Atlas, V. 213; A. Hamilton (1680-1720), under an officer with 200 men subordinate to the Cambay governor and sheltered from the Kolis by mud walls, is a place of some trade with a harbour fit for the largest (1000-1500 tons) ships though aground at low water. New Account, I. 143.

6 Bhávnagar was founded by Bhávsingh Gohel in 1723. Its chiefs were useful in putting down piracy and helping trade. Vakhatsingh, Bhavsingh's grandson (1772-1816), a strong-minded and shrewd ruler, was selfish and grasping, adding to his power by craft, fraud, and force. Rás Mála, 419. In 1777 Gogha had still some trade; Mr. Bolts with a large Leghorn ship, flying the German Emperor's colours, landed at Gogha and sold his cargo to advantage: Parson's Travels, 253.

7 Collector to Government, 26th September 1806. Bom. Gov. Rev. Rec. 102 of 1815, 2242.

Boats of from fifty to 250 tons burden were built, large quantities of cotton were exported, and new buildings were taking the place of its old empty houses.[1] In 1814 Mr. Rowles, the Collector of Kaira, on the ground of its good anchorage, store houses, and skilled seamen and craftsmen, pleaded that special favour might be shown to Gogha.[2] Tolls were taken off, sea dues were lowered, and orders issued for building a customs house, reparing the town walls, and stationing in the town an Assistant Collector and a battalion of native infantry.[3] Progress seems to have been slow. In 1822 the west wall was in ruins and the port with little trade was, as in the old Anhilváda days, useful only as a nursery for seamen.[4] In 1832 when Mr. H. Borradaile was Collector of Customs, much was done for Gogha. With the stone work of the Sonária lake the town walls were repaired, and the bulk of the trade was drawn from Bhávnagar to Gogha. From this time Gogha made steady progress, reservoirs were cleared, roads made, and the sea face improved.[5] In 1850 it was a thriving town with over 8000 inhabitants and a growing trade.[6] Ten years later (1860-1864), sharing in the wealth poured over western India by the American war, Gogha was a rich town, one of the chief cotton ports of Káthiáwár. Since then, the fall in the value of cotton and the spread of railways, have greatly reduced the trade of the Cambay Gulf ports. What is left has, by lowering tariffs and making roads, been drawn to Bhávnagar. Gogha is deserted, its cotton presses are idle, and its great store-houses are empty. The average annual value of trade at the port of Gogha for the five years ending 1871-72 was £159,310 (Rs. 15,93,100) against £81,196 (Rs. 8,11,960) for the year 1877-78.

Of its total 1872 population of 9571 souls, 6327 were Hindus, 3195 Musalmáns, and 49 were returned under the head 'Others.' Two classes of its people have gained a special name, the Nágar Bráhmans and the Lascars. Of these the Nágar Bráhmans, formerly the richest and most important community in the town, have during the last twenty years almost entirely deserted Gogha for Bhávnagar. The Lascars have been famous since the days of the Anhilváda kings, who set apart for them a square in their chief city. They still form the most trusted portion of every Indian crew that sails under the English flag.[7] Some of them are Hindus, by descent probably part Kolis part Rajputs, and now of the *Khárva* or sailor caste. Others are Musalmáns. Of these Tod (1822) noticed their Arab cast of face, but thought them of Hindu descent.[8] As is the case with the Musalmáns of most places along the coast of western India they have

---

1 Milburn's Or. Com. I. 153 2 Report of 23rd March 1814.
3 Gov. Res. 23rd August 1815. Bom. Gov. Rev. Rec. 102 of 1815, 2293-2303.
4 Tod's Western India, 250. 5 Bom. Gov. Sel, New Series, V. 67.
6 Rás Mála, 245, note 1. Its chief exports (1847) were cotton, tobacco, wool, and opium. Briggs' Gujaráshtra, 281. Mackay, Western India (1850), does not mention Gogha.
7 Ras Mala, 245. Their name is a byeword in Gujarát. It is used to frighten children to sleep, in the refrain *Suo, suo, baba Goghar avya*, 'Sleep, sleep, child, the Goghars have come,' and as the type of manly strength in the phrase *Lankáni ladi ane Gogháno var*, 'A Lanka bride and a Gogha bridegroom.' Ind. Ant. III. 278.
8 Western India, 250.

Chapter XIV.
Places of Interest.

GOGHA.

probably a strong strain of foreign blood. But their home tongue is now Gujaráti and neither in customs nor look can any marked line be drawn between them and other Gujarát Musalmáns.

As the chief town of the sub-division Gogha has the offices of a mámlatdár and of a chief constable. It has also the court of a subordinate judge[1] and a customs house. The municipality, in existence since 1855, had in 1877-78 a revenue of £351 (Rs. 3510) raised chiefly from octroi duties. Besides in keeping the streets in repair, lighting and watering them, municipal funds have been spent on the town walls and in improving the water supply. In 1817 fresh water had to be brought four or five miles.[2] Now the town has a good store of drinking water both in ponds and wells.[3] There is also a dispensary and a travellers' bungalow. For the last thirty-five years a Presbyterian missionary connected with the Irish Church Missionary Society has been stationed at Gogha. Seven schools, five for boys and two for girls, with an aggregate roll of 241 pupils, are at present (1878) maintained at the cost of the Mission.[4]

Remains.

There are few remains at Gogha. On the south-west corner of the town, outside the present walls, is the site of the ancient citadel reduced to earth-heaps except where a few stones remain, bound together by the grasping roots of the Pipal tree. Several of the wells are old and handsome with stone walls and steps. One, very deeply water-worn, is said to have remains of a writing in the arrowhead character.[5] The neat well-kept Christian grave-yard, on the shore between the town wall and the customs house, has no tombs of special interest, and, except their surprising number, there is little to notice in the Musalmán graves. A little way from the town, on the Gundi road, a separate burying ground is said to hold the bones of the Musalmán soldiers that fell in the fight between Muhammad Tughlik

---

1 The subordinate judge, whose jurisdiction includes the Dhandhuka sub-division, only occasionally visits Gogha.

2 Horsburgh's Sailing Directory, 1817, 284.

3 The stone facing of the sides of the Sonária lake, probably made in the eleventh century and once the chief ornament of Gogha was, in 1832, taken to repair the town walls. The embankment still remains, and, though a good deal escapes by leakage, is used as a reservoir, the water being carried by a covered passage into a smaller pool, the Rám Kund, inside of the town. Of the building of this lake, the following story is told. Once an engraved stone sacred to Kálka Máta floated down the river Dhádhar and lay hid among the sand of the Gogha beach. The goddess appeared to a pious goldsmith of Gogha, and telling him where the stone was hid, asked him to take it from its hiding place and in its honour build a temple and a lake. The goldsmith found the stone and spoke to two Vánia friends about the temple and lake. They could do nothing without money. Next night the goddess told the goldsmith to lead the Vániás to the sea shore. Here they found a rich merchant ship wrecked, and giving the crew a sum of money took over the cargo. The cargo was dates. But trusting in the goddess they stored the dates and examining them found in each bundle a bar of gold. With this spoil the temple and lake were finished and, after one of the Vániás, called *Anga sarovar* or Anga's lake. The rains came and the lake was filled, but, to the people's horror, with blood instead of water. Seeking the goldsmith the Vániás were told that the goddess was angry that they had taken credit for building the lake. On this they openly repented and changed its name to Sonária or the goldsmith's lake. Ind. Ant. III. 279.

4 Much of the materials for the Gogha account have been kindly supplied by the Revd. W. Beatty of the Irish Presbyterian Mission.

5 Tod's Western India, 250.

and Mokhráji Gohel. Objects of interest of a different kind, sometimes seen at Gogha, are the mirage, raising above the horizon the twelve miles distant trees of the opposite coast; in the cold season flocks of flamingoes, brightening with their pink and white plumage the mud and mangroves of the lower shore; and, for those willing to search for them, fossils of the same kind as those found in Piram.[1]

HARSOL.

Harsol, a town in the Parántij sub-division, with a population of 2127 souls lodged in 800 houses, thirty miles north-west of Ahmedabad, is situated among ravines on the banks of the Meshva. Under the Ahmedabad kings it was a place of some consequence, the centre of eighty-four villages, yielding a yearly revenue of £30,000 (Rs. 3,00,000).[2] In 1819, when taken over by the British, Harsol was no larger than a common village,[3] and in 1825 it was still quite insignificant,[4] its Vániás, poor, engaging only in retail traffic. A spring at Harsol is said to be, or to seem to be, warm at night and cool in the day time. Possibly the water is of a nearly constant temperature 80° or 90° and the change is in the air. It is said to have a peculiar taste and to be useful in certain diseases.[5] Of Harsol's former importance there are some traces in a ruined tower to the east of the town with an Arabic inscription bearing the date 1008 H. (1599). There is also an old Jáma mosque with an illegible inscription.[6]

KARAKTA'L.

Karakta'l, a village in the Viramgám sub-division, about six miles south east of Viramgám, is said to be the site of the old town of Kangávati Nagar.[7]

KHUN.

Khun. See Dholera.

MA'NDAL.

Ma'ndal, north latitude 23° 17′, east longitude 71° 58′, a small municipal town with, in 1872, a population of 6774 souls and a municipal income in 1877-78 of £149 5*s.* (Rs. 1492 - 8 *as.*), lies about fourteen miles north-west of Viramgám. Mándal is a place of some historic interest. When, in 1347, the Emperor Muhammad Tughlik came to restore order in Gujarát, the Rána of Mándal and Pátri, *Pari*, helped him and was honoured with robes and rewards.[8] Again in 1395 Mándal must have been a place of some strength, for Muzaffar Khán besieged it and would have failed to make any impression on it had not a pestilence broke out among the defenders.[9] A few years later Jhála Satarsálji of Mándal was one of the chiefs who joined in the revolt against Sultán Ahmad I. (1414);[10] and it

---

1 The best fossils are now found on the shoals between Piram and the mainland. But some good specimens may be seen in the stones of the town walls. A shrub of some interest the Protia Metipra, liked by insects and cattle for its sweetness, was (1830) noticed growing freely on the muddy parts of the Gogha coast. It is a Cape plant brought to Gujarát about 1790. Account of Gogha (1830) by Dr. Willoughby Arding.

2 Bird's Mirát-i-Ahmadi, 116.

3 Bom. Gov. Rev. Rec. 141 of 1819, 204, 8. 4 Bom. Gov. Sel. X. 7.

5 Trans. Med. and Phy. Soc. Bom. V. (New Series), 1859, 258.

6 Mr. G. G. Turner, C. S., June 1879. 7 Bom. Gov. Sel. X. 54.

8 Elliot's History of India, III. 261-263. A possible and much earlier reference is Ibn Khurdádbás (912) Mándal, Elliot I. 14 and 391.

9 Briggs' Ferishta, IV. 6.

10 Watson's Gujarát History, 33; Rás Mála, 268. He again conspired in 1419: Bird, 189.

Chapter XIV. Places of Interest.

was not till 1530 that the Mándal estates were made a part of the crown domains.[1] In 1741, the town was restored and fortified by a brother of the Viramgám Desái. In the latter part of the century it remained under the Maráthás till its transfer in 1817 to the British. Some small stone mosques and handsome temples are the only remains of its former importance.

MODA'SA.

Moda'sa, north latitude 23° 28′, east longitude 73° 20′, a municipal town of, in 1872, 7436 inhabitants and 2502 houses and a municipal revenue of £285 18*s*. (Rs. 2859), lies on the river Májham, fifty-two miles north-east of Ahmedabad. Since the establishment of the Musalmán dynasty of Ahmedabad, its frontier position, between settled Gujarát and the hilly tracts of Idar and Dungarpur, has made Modása an important station. It appears as a fortified post at the beginning (1415) of Sultán Ahmad I.'s reign,[2] and at the close of the sixteenth century it was the chief place in a tract of 162 villages, yielding a yearly revenue of £80,000 (Rs. 8,00,000).[3] Under the Moghals Sháháb-ud-din, the 3rd Viceroy (1577-1583), repaired the fort at Modása, and stationing a party of cavalry there completely settled the country.[4] During the eighteenth century Modása greatly declined, and when (1818) it came under British management, the town was most backward. Quickly recovering, it had in 1825 a numerous and respectable body of traders with an estimated capital of £90,000 (Rs. 9,00,000). Of local produce they exported clarified butter, oil, gums, and hides, valued at £2391 (Rs. 23,910) a year, and in return brought, from Baroda and Ahmedabad, cotton, cocoanuts, cocoanut oil, sugar, tobacco, dried fruit, spices, silk cloth, and stuffs of a yearly value of £5326 (Rs. 53,260). Of these, tobacco and spices were sent to Vághar, and cotton and a dye, *sorangi*, received instead. Cloth for head-dresses and robes, opium, and *sorangi* came from Partábgad in Rajputána. The population has risen from 4059 souls in 1825, to 7436 in 1872. Its present industries are dyeing, calico-printing, and oil-pressing. Though of an inferior kind its sesamum, *tal*, oil is in demand as far as Dholera, Wadhwán, and Limbdi. *Mahuda* oil is also exported for soap. The chief trade is in cloth brought from Bombay and distributed over the surrounding districts. There is also a through camel traffic taking raw cotton and opium from Málwa to Ahmedabad, and bringing back cloth and other foreign products.[5] As the head quarters of a petty division, *mahál*, Modása contains the offices of a mahálkari and a chief constable. It has also a post office.

PARA'NTIJ.

Para'ntij, north latitude 23° 27′, east longitude 72° 54′, a municipal town with, in 1872, 8341 inhabitants, 2994 houses and a yearly municipal income of £2631 (Rs. 26,310), the chief town of the Parántij sub-division, lies about thirty-three miles north-east of Ahmedabad. Closely built, it stands on the east bank of the Bokh, a deep wide hollow believed to have once been the bed of the river Háthmati.[6] Under the Ahmedabad kings Parántij was the centre of

1 Watson's Gujarát History, 48.
2 Rás Mála, 251.
3 Bird's Mirát-i-Ahmadi, 116.
4 Bird's Mirát-i-Ahmadi, 354.
5 Mr. Lely, C. S.
6 See above p. 9.

eighty-four villages, yielding a yearly revenue of £50,000 (Rs. 5,00,000). In 1825, with 5310 inhabitants and 1685 houses, the town had many good and substantial buildings and was improving. Its exports of clarified butter, grain, and leather were valued at £1980 (Rs. 19,800), and its imports, silk and cloth from Ahmedabad, and cloth turbans robes wheat and raw sugar from Málwa, were valued at £5092 (Rs. 50,920). At present Parántij is a prosperous town, the centre of a district whose resources have greatly increased under British rule. Its special product is soap. With a plentiful supply of *mahuda* oil and fuel from the Mahi Kántha hills, and of lime and soda, *us*, from neighbouring villages, this industry has of late years greatly developed. There are now six soap factories with a total average yearly outturn of 178 tons (10,000 *mans*). The surplus goes to Ahmedabad. Formerly there was a traffic with Deesa through the Gáikwár districts of Visnagar and Bijápur, now the whole trade, partly from the greater safety of the roads, partly from its wider demand, sets to Ahmedabad.[1] As the head-quarters of a sub-division Parántij has a mámlatdár's and a chief constable's office. It is also provided with a post office, a travellers' bungalow, a dispensary, and a school-house. The municipal income is raised chiefly from octroi duties.

PA'TRI.

Pa'tri, north latitude 23° 11', east longitude 71° 50', a walled town in the Viramgám sub-division, containing, in 1872, a population of 6320 souls, lies on the Khárághoda branch of the Wadhwán railway fifty-two miles west of Ahmedabad. In the bare plain on the border of the Ran, Pátri, surrounded by a wall and with a strong central castle, has well built houses and temples, and, especially since the opening of the railway, is a place of some trade chiefly in cotton and wheat brought from the west and north, and in molasses from Bombay. In 1810 its defences were of uncommon strength. Towards the east was a large reservoir, and on the south and west a triple hedge of milkbush, with a narrow deep ditch between each hedge. I· side the hedge was a wall of gravelly stone with cement built towers. Within the walls, a space 150 yards broad was covered with houses of the meaner sort; then came a second well built wall in good repair, and another space with the market place and good houses; next was a ditch, forty feet broad by twenty deep, flooded at pleasure, and over the ditch the citadel, or *rájkot*. This, in the extreme north corner of the town, had its eastern side sheltered by the reservoir and the rest by the water ditch. High, well built, square, with corner and side towers, the citadel commanded every part of the town. Within it the chief had a fortified house and over the house, the last place of refuge, an eight-cornered tower. In 1827 the walls were in many places ruinous and in all weak. Except the upper part of the tower the citadel was perfect. The houses, only about 100 in all, were low and bad and the town poor. The people were in nearly equal parts, Kolis, Vániás, and Kanbis.[2] Since 1827 the town seems slowly to have improved. In 1840 the inhabitants had increased to 2961 souls, and in 1872 to 6320. The opening of the

[1] Mr. Lely, C. S.

[2] Bom. Gov. Sel. X. 74, 75.

Chapter XIV.
Places of Interest.

PA'TRI.

railway in 1872 has done much to enlarge and enrich the town. Pátri, originally the head quarters, *páth*, of the Dhrángadra chief-ship was, in 1740,[1] with nineteen villages and the salt revenue, on condition of his giving up all claim to that town, bestowed by the Maráthás on Bhávsingh, Desái of Viramgám.[2] In 1757, on the final Marátha capture of Ahmedabad, Bhukandás, uncle of Bhávsingh the original grantee, intriguing with the Peshwá's officer, had the original grant revoked and a new grant passed. Under the terms of the new grant Bhávsingh, on the condition of serving the State with 500 horse, received eleven villages and three-fourths of the salt revenue, and his uncle three villages. As the owner of a strongly-fortified castle, the Pátri chief played a somewhat important part in the disorders of the latter years of the eighteenth century. In 1803 Vakhatbhái, Bhávsingh's grandson, ventured to oppose the Gáikwár's army. But beaten and forced to pay a fine of £15,000 (Rs. 1½ *lákhs*) he sunk into debt. The condition of service was also remitted and in its place a tribute of £1200 (Rs. 12,000), payable every fifty months, was imposed. In 1818 the British Government took over the entire management of the salt works, granting £1200 (Rs. 12,000) a year in compensation. The British law gave his creditors greatly increased powers over the Desái and failing to pay, hewas in 1821 and again in 1827, arrested and sent to prison.[3] Except the town walls, and a fine masonry reservoir, there is scarcely anything of interest at Pátri.

PIRAM.
Appearance.

Piram in the Gulf of Cambay, north latitude 21° 35′ 19″, east longitude 72° 34′ 48″, four and a half miles south of Gogha and two and a half from the nearest part of the Káthiáwár shore,[4] is a reef of rock covered in part by blown sand, at high water 1½ miles long and barely half a mile broad.[5] It forms part of the estate of the Gogha Kasbátis to whom it was assigned by one of the Delhi Emperors. Except on the south it is surrounded by rocky reefs rising to the surface from a depth of from sixty to seventy feet.[6] Past the island, the tide runs with extreme force, at springs in a three or four feet high wall

---

[1] Mr. Melvill (Gov. Sel. X. 58) gives 1731 (1787 S.) as the date of the cession: 1740 is the Mirát-i-Ahmadi date.

[2] Bhávsingh's family, Kadva Kanbis by caste, are said to have come from Chámpáner, probably during its decline in the sixteenth century, and settling at Viramgám, first as headmen and afterwards under Aurangzeb as managers, raised it to wealth and importance. Details are given under 'Viramgám'.

[3] East India Papers, III. 683 : Bom. Gov. Sel. X. 59.

[4] Ethersey (1838), Trans. Bom. Geo. Soc. 2, 55. Other accounts differ. Ibn Batuta (1340-1350) says four miles from the main land (Yule's Cathay, II. 415); Dr. Buist (1855) one-third of a mile from the coast, twelve miles from Gogha : Trans. Bom. Geo. Soc. XIII. 23; three miles off the coast, Rás Mála, I. 321; Thornton's authorities differ from 500 yards to two miles. But the 500 yards is the breadth of the deep channel not the whole distance to the shore, Jour. Bom. As. Soc. V. I. 290.

[5] Mr. Blanford Mem. Geo. Survey of India, VI. 212; 1800 yards long and from 300 to 500 yards wide, Trans. Bom. Geo. Soc. II. 55; Major Fulljames (1836), 1½ to two miles long, ½ to ¾ mile broad; Dr. Lush (1836) three miles round, Jour. Bom. As. Soc. V. 2, 767; Dr. Buist (1855) at high water three miles round, at low nine long three broad, Trans. Bom. Geo. Soc. XIII 23.

[6] At low water spring tides the channel, between the island and a rocky reef in the centre of the Gulf, is only 1200 yards wide. To the north-west it has an extraordinary depth of 360 feet, the bottom of yellow clay; to the west the depth varies from 240 to 280 feet, and to the east from 198 to 160. Ethersey (1838) Trans. Bom. Geo. Soc. II. 455.

Chapter XIV.

Places of Interest.

PIRAM.

Appearance.

rushing at the rate of twelve miles an hour. To avoid the chopping sea, especially near sunken reefs troublesome and at times dangerous, boats crossing from Gogha to Piram stand out as if making for Dehej Bandar at the mouth of the Narbada. Along the western coast is a broken line of twenty to thirty feet high conglomerate and clay cliffs,[1] and, except a stretch of level land in the east, the rest of the island is almost covered by ranges of sand hills resting on a scanty bed of black soil, and nowhere rising more than sixty feet above high water-mark.[2] In the east some millet is grown and the low sand hills are covered by asclepias. But except these, some *nim*, Azaderachta indica, trees, and a fringe of mangrove bushes along the eastern shore, although fully supplied with water both in wells and reservoirs, the island is without vegetation.[3] Uninhabited in the rains, during the fair season (October to May) besides the light-house guards,[4] there are about twelve families of husbandmen and fishermen.[5]

History.

Till the fourteenth century[6] Piram would seem to have remained in the hands of Báriya Kolis. Then under their leader Mokhráji, the Gohel Rajputs, who about a century and a half before had retired from Márwár to Gujarát, passed south from Ránpur near Dhanduka and took Gogha and Piram. Strengthening himself in his island fortress Mokhráji became a great pirate chief. 'Many a vessel did he plunder, in every port was he an object of terror, from all that sailed he exacted tribute.'[7] But his power was short-lived. About 1347 complaints of his piracies were laid before the Emperor Muhammad Tughlik then in Gujarát quelling a revolt. Advancing in person he attacked Piram, slew Mokhráji and took his fort.[8] On Mokhráji's defeat, the island was deserted and an attempt to colonize

---

1 The order of the strata in an exposed cliff at the south-east end of the island is, beginning from the top; reddish mould mixed with stony rubbish, three feet; yellow pudding stone, 1½ feet; sandy clay, one foot; dark coloured pudding stone, six inches; sandy clay, four feet; yellow pudding stone, one foot; sandy clay, six inches; sandy clay, four feet; yellow pudding stone, one foot; sandy clay, six inches; recent sand stone, six inches; sandy clay, eight feet; yellow pudding stone, one foot. Trans. Bom. Geo. Soc. II 56. From the lowest stratum of pudding stone nearly all of the fossil remains have been obtained. Jour. Bom. As. Soc. V. 1, 290.

2 Jour. Bom. As. Soc. V. 1, 291. The conglomerates, of which there are two kinds, are firm compact rocks and excellent building stones. The wall surrounding part of the island is built of them. They have been largely quarried for grindstones and as building stones. Mem. Geo. Surv. VI. 213.

3 Dr. Buist (1855) notices a group of large pools fifty to seventy yards across, and in March from three to six feet deep.

4 The light burns from the top of a tower. Details are given above, page 84.

5 Dr. Buist (1855) Trans. Bom. Geo. Soc. XIII. 23. Piram was not formerly so unhealthy. In 1838 there were many Kolis living there all the year. About that time it was tried as a sanitarium for soldiers but proved so unhealthy that not only the invalids but the people of the place had to leave.

6 Piram has been (As. Res. IX. 195) supposed to be the island Baiones mentioned in the Periplus about A.D. 160. But Vincent's identification of Baiones with Diu seems better to suit the text. Commerce of the Ancients, II. 394. It may be Al Idrisi's (1154) Mend, that is Mehd or Koli island, six miles off the Cambay coast whose people were thieves. Jaubert, I. 171.

7 Rás Mála, 248.

8 This is the account given in the Rás Mála (247). According to Tod (Western India, 258 and Rajasthán, I. 266) the Gohel of Piram fought in 1303 in defence of Chitor and for his services was rewarded with the title of Rával. But this is a natural bardic addition. Some further details are given under 'Gogha.'

Chapter XIV.
Places of Interest.

PIRAM.

and fortify it failed.[1] The Hindu seamen of Cambay Gulf still cherish Mokhráji's memory seldom passing Piram without making him an offering.[2] Of Mokhráji's stronghold there remains skirting the shore, a ruined wall with, below high tide level, a gateway ornamented by two rock-cut elephants ten feet long by eight or nine high.[3] After the failure of the fourteenth century settlement no attempt would seem to have been made to fortify Piram till, on the decay of Moghal power about the middle of the eighteenth century, the ambitious Surat merchant Mulla Muhammad Ali, built a fort on Piram and tried to establish himself as an independent chief. Afraid of the climate his people forsook him, and the Mulla, giving up Piram, built a fort at Athva on the Tápti a few miles below Surat.[4] The lines of the Mullá's fortress, from whose ruins the light-house tower was built, may be seen near the centre of the island and stretching across its entire breadth.[5] Besides traces of fortifications, there are remains of temples, one of them with (1836) a rudely cut sitting figure of Buddha.[6] The local story that Mokhráji built a mole from the mainland to Piram has, perhaps, no better foundation, than the half sunk wall and gateway, and the reefs that, at low water, stand out like a giant's causeway.[7]

Fossils.

Its large store of fossils gives a special interest to Piram. Besides masses of petrified wood large quantities of animal remains were found in 1836.[8] Almost all were embedded in the rock in the south-east corner of the island where the sea washes bare the lower conglomerate. The remains are the same as those of upper Sind and of the Siválik hills and lower Himálayas. Besides two titanic ruminants, apparently with no living types, named the Bramatherium and the Sivátherium, are varieties of elephant, rhinoceros, hippopotamus, horse, ox, antelope, several forms of crocodile, fresh water tortoises, and fishes of most gigantic size.[9] Great numbers of fossils were taken away in 1836, and since then so constant has been the drain, that, except broken pieces kept in store by the fishermen, specimens are hard to find.

RA'NPUR.

Ra'npur, north latitude 22° 21′, east longitude 71° 45′, a town and fort in the Dhandhuka sub-division about twenty miles

---

[1] Ibn Batuta (1342) in Yule's Cathay, II. 415. The date of Mokhráji's defeat seems uncertain. Ibn Batuta started on his mission to China in 1342 (Lee, 155) and he speaks of Piram, or Bairam, as deserted, while 1347 was the date of the Gujarát revolt. See above under 'Gogha'.

[2] Rás Mála, 248.

[3] Major Fulljames (1836), Jour. Bom. As. Soc. V. 1, 290.

[4] Major Watson's Gujarát History, 104.

[5] Rás Mála, 247.

[6] Major Fulljames (1836) Jour. Bom. As. Soc. V. 1, 290.

[7] Rás Mála, 247. Both Major Fulljames and Colonel Tod seem to believe that such a mole or bridge did at one time exist.

[8] Dr. Buist, Trans. Bom. Geo. Soc. XIII. 23.

[9] Of the size of some of the remains Baron Hugal wrote (1836); "one fractured piece of a tusk measured from the centre to the outside of the circle 5¼ inches, that is 10½ inches in diameter or 34 in circumference.' Jour. Bom. As. Soc. V. I. 288. The scientific names of the animals whose remains have been discovered are Mastodon latidens; Mastodon perimensis; Dinotherium indicum; Acerotherium perimense; Rhinoceros; Bramatherium perimense; Camelopardalis; Capra; Antelope; Sus hysudricus. Theobald's Memoir on Gujarát Geology.

Chapter XIV.
Places of Interest.

RA'NPUR.

Appearance.

west of Dhandhuka with, in 1872, a population of 5796 souls, is, as one of the posts on the border land between Gujarát and Káthiáwár, a place of historic interest. Beyond the limits of the bare flat plain that stretches along the shore of the Gulf, the land round Ránpur is well wooded and broken by ranges of hills. On the north bank of the Bhádhar at its meeting with the Goma, the town, with some tall well built houses, has a pleasant and prosperous air. On the raised strip of land between the two rivers is a handsome European dwelling built, about 1830, by Mr. Jackson, Collector of Ahmedabad, and near it, the chief ornament of the town, a fine old castle, partly in ruins.[1]

History.

Of the history of Ránpur several details, stretching back to the fourteenth century, have been preserved. It is said to have been founded, about the beginning of the fourteenth century, by Ránáji Gohel a Rajput chieftain, the ancestor of the Bhávnagar family. The forefathers of this Ránáji, who claimed descent from Shálivéhan (79 A.D.) were, in the thirteenth century, driven by the Ráthors from their seat in Khedgarh on the Luna river about ten miles from Bhalotra in Márwár. Retreating south under their chief Sejakji they took refuge with Rája Kalat, the Chudásma ruler of Junágad. Rája Kalat treated the strangers with kindness, and calling it Sejakpur, settled Sejakji on the site of the present Ránpur. Ránáji, Sejakji's son, married the daughter of Dhan the Mair or Koli chief of Dhandhuka, and strengthening Sejakpur with a fort called it Ránpur. Mokhráji, Ránáji's son, increased the power of his clan and carried their capital south to Piram and Gogha. On the sea he became a noted pirate, and bringing down on himself the wrath of Muhammad Tughlik, was defeated and slain about 1347. Though the head of their clan was killed, the Gohels kept their hold on Ránpur. More than a hundred years later another Ránáji ruling in Ránpur, by his Rajput pride and hate of Islám, enraged Mahmud Begada (1459-1511) and was defeated and slain, and his castle and town razed to the ground.[2]

Shortly after this Háloji and Lakhdarji, Ránáji's nephews and chiefs of Muli, befriending some Jat refugees, incurred the anger of the ruler of Sind. Hearing of his advance against them, the brothers retired to the hills, but were pursued and defeated by the Sind force, and Háloji carried off prisoner. Lakhdarji, by the help of Mahmud Begada, redeemed his brother. And he adopting the king's religion was restored to Ránpur and founded the family of the present

---

[1] The materials for this account of Ránpur have been contributed partly by R. Courtenay, Esq., C. S., partly by James Burgess, Esq., Arch. Surv. to Govt.

[2] Two stories are told of the ground of quarrel between Mahmud and Ránáji. One that Ránáji's wife refused to eat with her sister who had married Mahmud. The other, that Ránáji killed the son of an old Musalmán woman because he raised the call to prayer in Ránpur. Rás Mála, 269. Of the fall of Ránpur Mr. Forbes (Rás Mála, 279) gives these details; the fight lasted long and Ránáji, continually giving way, reached the gate of the fort. He sent to his wives to tell them that if the royal umbrella went down they should destroy themselves to avoid falling into Muhammadan hands. As the fight went on, the bearer of the umbrella set it down for a moment to drink water. The ladies thinking their husband had fallen, threw themselves into the well and died. Afterwards Ránáji was killed and the Muhammadans entered the fort. Rás Mála, 279.

Chapter XIV. Places of Interest.

RA'NPUR. *History.*

Ránpur Molesaláms.[1] About the middle of the seventeenth century, A'zam Khán the 23rd Viceroy (1635-1642), the famous builder of castles and palaces,[2] to overawe the Káthi freebooters raised (1640-1642) the castle of Sháhápur whose ruins still ornament the town. About a hundred years later, in the troubled times of Musalmán decay, the Wadhwán chief attacked Ránpur. Hard pressed the Molesalám chief applied for help to Dámáji Gáikwár. Dámáji came and saved Ránpur. But so high a sum did he claim for his services, that to pay it Alambhái had to part with his chief town and castle. Ránpur remained with the Gáikwár till, in 1802, it was made over to the British. It is a place of few manufactures and little trade. The people are almost entirely cultivators, Sunni Bohorás, Kumbhárs, and a few Sathvárás. The descendants of the old chief, now divided among five families, still hold the position of proprietors, *tálukdárs*, owning, besides many shares, about nine whole villages.

Remains.

A'zam Khán's castle to the south of the village at the meeting of the Bhádhar and the Goma, looks from the outside not unlike one of the old south of Scotland towers. The walls three to four feet thick of stone and cement as hard as stone, enclosing a large area, rise on the north fifty feet above the river-bed. The lower walls are in good order, but in many places the massive towers and overhanging battlements are in ruins.[3] The east gate opens into a courtyard eighty feet long and 277 broad. Within this is a second courtyard 277 feet long by 230 wide. In its inner wall is a handsome gateway over which was a marble slab with these words in Persian[4]: 'He is the Creator and the Allknowing. The great Lord A'zam Khán, the Lord of his time, one, the like of whom was never given birth to by a bride of this world, the fearless lion, the bravest of the brave, and the lord of the earth, the Khán of high rank, may his life be long, asked me to find out the date of this castle, from which be ever kept off the power of the evil eye. Plunging into the ocean of thought I marked with the seal of my heart: *Aazam-ul-bilád*, 'Greatest of Cities.' These words represent 1048 H., that is A.D. 1640. Within this gateway on the right is a mosque with a reservoir and the grave of a saint named Ragusháh Pir. Over the pulpit of the mosque are these words in Persian: 'God is great. In the reign of the king, splendid as Jamshed, the just and the generous Sháháb-ud-din Muhammad II., the lord of the time, Sháh Jahán the valiant warrior, may the Almighty maintain his rule, in the month of Zil Haj in the year 1050 H. (A.D. 1642), the humble slave of the Almighty, A'zam Khán, during the term of his government of Gujarát, laid the foundation of this sacred mosque in this castle of Sháhápur, and finished it that the servants of the True God may worship Him.' To the west of the mosque, is a strong roughly-built

---

1 Rás Mála, 280. Háloji's brother, who also became a Musálman, was the founder of one of the branches of the Dholka Kasbátis. Ditto, 281.

2 It was this A'zam Khán who built the caravanserai, now the jail in Ahmedabad, see p. 274.

3 According to the local story A'zam Khán left the fort unfinished and a dishonest subordinate used bad work and bad material.

4 The slab has fallen down and is now (1877) in the village office, Mr. Courtenay, C.S.

RA'NPUR.

bath with a cellar and under-ground passage, and near the passage a shrine to Mahádev and to a Máta.[1] On the wall of the fort, overhanging the river, was a marble slab with these words in Persian: 'God is great. A'zam Khán, while Viceroy of Gujarát, began to build this bath on the 1st of the month of *Jamádil A'khar* and completed it at the end of *Muharram* 1052 H. (A.D. 1644). Ye who see this place remember him kindly.' To the south of the bath is the Governor's house, afterwards used as an office. In front of it, stone-edgings still mark the shapes of flower-beds, and above the beds is a small terrace with round unpaved spaces for flowering shrubs. Close to the house, at the north-west corner of the fort, is a well, which, along stone channels, supplied water to the whole fort. On the bank of the river to the east of the village, is a well and the remains of a garden, also the work of A'zam Khán. On the well are these words in Persian: 'God is great. A'zam Khán the servant of God in the month of *Shawwál* in the year 1051 H. (1643 A.D.) when Viceroy of Gujarát having built this well left it to the garden for a help to the people.' A little beyond the well are some ruins said to mark the site of a Rajput or Molesalám fort.

SA'NAND.

Sa'nand, north latitude 22° 59′, east longitude 72° 25′, a town with a population, in 1872, of 7229 souls, the head-quarters of the Sánand sub-division, is situated sixteen miles west of Ahmedabad and two, south of the Sánand station on the Wadhwán railway. Though formerly one of the head-quarters of the ancient house of Koth, it contains no buildings or historical remains of any interest. Owing to the resistance of its Shrávak residents to all attempts to clean the town, its general appearance is mean and filthy. Since the opening of the railway its trade has increased, the tonnage of goods rising from 469 in 1872 to 3185 in 1877, and the number of passengers from 36,500 to 50,304. The town has a post office and a dispensary. Outside the town, on the Ahmedabad road, handsome offices for the mámlatdár and chief constable have lately been built, and, on the station road, is a new and ornamental rest-house, *dharamshála.*

SARAGVA'LA.

Saragva'la, in the south of the Dholka sub-division, is said once to have been a port. A mound near the village, and round stones pierced with holes, formerly used as anchors, support the belief.

SIHOR.

Sihor is a Chunvál village, about twelve miles north of Viramgám, where, in 1825, were the well-marked remains of an old city. The line of walls could be clearly traced, bricks much larger than those now in use were found, and many bracelets and other ornaments were often dug up. Like Kangávati and Pátan, Sihor is, about 300 years ago, said to have been overwhelmed in a storm of dust and sand from the Ran.[2] A ruined temple of a Máta bears the date 1625 S. (1569).[3]

---

[1] The image is perhaps that of Ráj Bái whom Ránji made his *Kul Devi* or family goddess. Rás Mála, 278.

[2] Bom. Gov. Sel. X. 75. This is not the well known Sihor. See Rás Mála, 349.

[3] Mr. G. B. Reid, C.S. Mr. Reid adds, several classes of Viramgám Hindus bear the surname Sihori. June, 1879.

Chapter XIV.
Places of Interest.

VA'GHPUR.

Va'ghpur, a *mehvâsi* village in the Parántij sub-division, contains the tombs of Captain Montresor and Lieutenant Sandwith, who died with Colonel Stanhope's detachment in 1821. Mr. Sandwith's body was afterwards taken to Ahmedabad. The tombs were (1825) carefully preserved by the people and the spot where they stood was enclosed with a hedge.[1] One of them is still (1879) in good repair; the other from which the body was removed is broken.

VAUTHA.

Vautha, in the Dholka sub-division, about seven miles south-east of Dholka town, is held sacred as the meeting of seven rivers, the Sábarmati with its tributary the Háthmati, and the Vátrak with its tributaries the Khári, the Meshva, the Shedhi, and the Májham. Here, in the month of December, a fair is yearly held lasting for six days. From 20,000 to 22,000 pilgrims generally come together and a considerable trade is carried on.

VIRAMGA'M.

Appearance.

Viramga'm, north latitude 23° 6', east longitude 72° 6', a walled municipal town, in 1872, of 19,661 inhabitants, and the head-quarters of the Viramgám sub-division, lies on the Wadhwán railway thirty-eight miles west of Ahmedabad. On low ground, in a bare wide plain a few miles east of the Ran, Viramgám is surrounded by a tower-flanked brick and stone wall, rectangular in shape, and about 2⅛ miles round. In the wall are five gates, on the north the Golvádi gate leading to Pátan; on the north-east the Bharvádi gate leading to the railway station; on the east the Ráipuri gate leading to Ahmedabad; on the south-west the Gangásar gate, and on the west the Mánsar gate. There are also two unopened gateways on the north-west and north-east, and in the south face is a window through which water is drawn from the Gangásar lake. With houses chiefly of brick and mud, except some newly finished offices and a school and dispensary, the town has few ornamental buildings. Since the opening of the railway (1872) Viramgám has been spreading. Near the station a north suburb with two cotton ginning factories has sprung up, and near the Mánsar lake is a west suburb with busy cotton and grain markets.

History.

At the close of the eleventh century, Minal Devi, the mother of Sidh Ráj Jai Singh, adorned Viramgám by building the Mánsar lake, and, during his reign (1094-1143), Sidh Ráj added several shrines and temples.[2] Under the strong Mándal chief Viramgám did not become part of the Ahmedabad crown lands till 1530.[3] Commanding the entrance to Káthiáwár, the Moghal Viceroys chose it as the head-quarters of the Jhálávár district,[4] and in the disturbances of the eighteenth century it was the scene of several struggles.

---

[1] Bom. Gov. Sel. X. 43.

[2] Rás Mála, 197: Bird's Gujarát, 157. According to Mr. Melvill, who surveyed it in 1827, Viramgám did not rise to be more than a suburb of the city Kangávati, on the site of Karaktal, till the destruction of that city by the Musalmáns. Viramgám owed its rise to some Kadva Kanbis now represented by the Desái of Pátri. This family came from Chámpáner and first gained the Patelship and afterwards, from Aurangzeb, the joint Desáiship of the tract of land known as Jhálávár. Bom. Gov. Sel. X. 54.

[3] Watson's Gujarát History, 48.

[4] Bom. Gov. Sel. V., New Series, 66.

Fortified by its Desái about 1730, it continued under a Musalmán governor, till in 1735 the Desái Bhávsingh called in the Maráthás who, dislodging the Musalmáns, held the town till 1740. In that year Bhávsingh, hoping to make himself independent, drove out the Maráthás. But after four months they returned in strength, and Bhávsingh unable to cope with them, on promise of the estate of Pátri, gave up Viramgám.

Trade.

Of 19,661 its total 1872 population, 15,290 were Hindus, 4363 Musalmáns, and 8 came under the head 'Others.' Coarse cloth, quilts, and fans are made in Viramgám. But its only special industry is the manufacture of snuff from Kaira tobacco. Soon after its transfer (1820), Viramgám with a population of from 15,000 to 20,000 souls, two-thirds Hindus and one-third Musalmáns, was well built and thriving.[1] In 1827 at the time of survey, though from the stoppage of the Gujarát tribute to the Deccan several of the chief bankers had lost much and retired to Dásgaon in the Konkan, there were still several men of capital especially a family of Bháts who owned about £140,000 (Rs. 14 *lákhs*). It had not much trade, but showed no signs of decay. About this time the walls were repaired and the increased security did much for the town.[2] Eight years later (1835) the population had increased and a surprising number of new and substantial houses had been built.[3] Of late years the opening of the Wadhwán railway has brought much trade to Viramgám. Within the last six years, the quantity of goods carried has risen from 24,553 tons in 1872 to 67,385 tons in 1877, and the number of passengers from 115,091 to 174,502. Of the chief articles of trade, millets, *juvár* and *bájri*, and wheat, grown locally and brought from Pátan and other northern districts, are sent to Bombay, and cotton, grown locally and brought from the northern districts, goes to Ahmedabad and Bombay. Cotton is one of the chief articles of Viramgám trade. There are at present (1878) 130 gins worked by steam power and eleven presses of which one is worked by steam power. Oil seeds from the northern districts go to Bombay. Under oil seeds, rapeseed has, since the opening of the railway, become a chief article of export. Molasses, of late years in greatly increasing quantities, is brought from south Gujarát chiefly for local consumption. Sugar and sugarcandy are brought from Bombay. Timber comes from the Panch Maháls and Broach for local use and for the north Gujarát districts. Piece goods are imported in growing quantities from Bombay and Ahmedabad. Of local merchants, besides Shrávaks and Modh Vániás, there are a few Kanbis and Bráhmans. The opening of the railway has drawn fresh capital, and Bohorás, Pársis, and Europeans now compete with the local traders. Most of the traders have agents in Bombay. About one-half of the raw produce is said to be bought direct from the cultivators, and the rest through dealers and money-lenders. Before reaching the consumer most piece goods pass through two hands, a wholesale

---

[1] Bom. Gov. Rev. Rec. 17 of 1821, 48, 49.
[2] Bom. Gov. Sel. X. 73. [3] Jamábandi Report, 1834-35.

Chapter XIV.
Places of Interest.
VIRAMGA'M.

and a retail dealer. The trading season lasts from October to June. It is at its height in February, March, April, and May. The Viramgám traders form a very strong guild, *mahájan*. The funds, collected by a percentage charge on trade profits, are spent on temples, on an animal home, and in enforcing the observance of certain holidays.

Municipality.

Viramgám has a municipality with, in 1877-78, a yearly revenue of £2808 6*s*. (Rs. 28,083) raised by taxes on imports and representing an average taxation of 2*s*. 10*d*. per head of the population. As the head-quarters of a sub-division, Viramgám has a mámlatdár's, a chief constable's, and a subordinate judge's office. The first two are held in a large and handsome new building. Among other new and ornamental, buildings are a municipal office, an Anglo-vernacular school, a dispensary, and a travellers' bungalow. There is a rest-house outside of the Mánsar gate, and near the mámlatdár's is a headman's office, *chora*.

Remains.

The town is supplied with water chiefly from three reservoirs, the Gangásar lake on the south-east and south, lying outside of the wall except a small portion known as the Gusaria lake; in the south-west beyond the Gangásar gate the Dhunia lake; and in the west the Mánsar lake. Of these, the Mánsar lake, built about 1090 by Minal Devi, the mother of Sidh Ráj Jai Singh, is the chief beauty of Viramgám. This, the glorious lake, *mánsarovar*, now shortened into *mánsar*, 220 yards round, shaped, they say, like the conch, the Hindu war shell, is surrounded by flights of stone steps. Gathering from the west, the water passes into a stone-built eight-sided silt-well, *kund*, with, in a niche in each side, a figure cut in bold relief. From the silt-well, through a stone-lined channel and a three-cylinder tunnel, the water passes into the lake. Over the tunnel is a large pyramid-roofed pavilion repaired by the Maráthás, and made a temple of Báuchráji, or, as she is locally called, Mánsar Máta. Towards the north the steps round the lake are ruinous, and in several places broken roadways run down to the water's edge. Round the top of the steps runs a row of small spire-roofed shrines, many now wanting but once said to have numbered more than 300. In each shrine on one side of the lake is a pedestal, probably for an image of Krishna, and on the other side a round basin, *jaládhár*, probably sacred to Shiv. On either hand of one of the roadways that run to the water's edge, is a larger temple with double porch and spire and across the lake a flat roofed colonnade.[1] Near the lake is the Idgáh or Musalmán place of prayer. In the town are two old mosques the *Ganj Bazár* or Grain Market Mosque, a Hindu temple changed to its present form about 1560; and the Gangásar mosque built in 1584 by Abdul Aziz Syed bin Abu Muhammad.

---

[1] Rás Mála, 197.

These accounts of towns are partly taken from notes and contributions received from the following gentlemen: Mr. Lely, C.S., on Dholka, Modása, Parántij, and Sánand; Mr. C. E. G. Crawford, C.S., on Parvála, Dhandhuka, Dholera, and Gogha; and Khán Sáheb Ardesar Jamsedji, Mámlatdár of Viramgám, on Mándal, Pátri, and Viramgám.

INDEX.

Acquisition of district, 143.
Administrative sub-divisions, 2.
Administrative changes, 144.
Advances of grain, 70.

Ahmedabad district: Boundaries; sub-divisions, aspect, and hills, 1-4; rivers; floods; creeks, lakes, islands, climate, 5-21; minerals, forests, trees, animals, birds, fish, 22-30; population in 1846, 1851, and 1872, census details of 1872, 31-34; details of Hindus, Musalmáns, Pársis, and Christians, 35-44; villages, houses, communities, movements, 45-48; soil, irrigation, tillage, holdings, stock, crops, 49-57; peasants, bad seasons, 58-62; capitalists, bills of exchange, Bank of Bombay, insurance, gambling, classes who save, modes of investment, 63-67; borrowers, rates of interest, currency, 68-73; wages, prices, condition of labourers, 74-80; roads, bridges, rest-houses, ferries, shipping, light-houses, post and telegraph offices, 81-85; trade (750-1877), details of the railway and sea trade, present (1877) lines of traffic, condition of traders, 86-105; trade guilds, 106-115; manufactures, 116-141; history, 142; acquisition; staff; state of the district in 1803; villages; Kasbátis; Col. Walker's proposals; Girásiás, Gámetis, Chuvália Kolis; Mr. Elphinstone's changes in 1821; first survey (1820-1826); second survey (1853-1863); Tálukdárs; Parántij Kolis; seasons, development of the district (1846-1877), 143-190; civil and criminal justice in 1803, civil courts' statistics, offences, police, jails, 191-199; balance sheet, local funds, municipalities, 200-208; schools, pupils, town and village education, libraries, newspapers, 209-217; plague and pestilence, diseases, hospitals, dispensaries, vaccination, cattle diseases, births and deaths, 218-229; sub-divisions, 230-248; places of interest, 249-356.

Ahmedabad City: Position, 249; history, 249; new city, how founded and named, 249; Asával, the old town, 250; chief events under the Ahmedabad Kings (1411-1572), 250; under the Moghal Viceroys (1572-1757), 251-258; state of the city between 1573 and 1600, 252; arrival of the English (1613), 253; and of the Dutch (1618), 253; the city in 1618, 253; in 1626 and 1638, 254; in 1666, 255; time of disorder (1707-1737), 255-257; joint Musalmán and Marátha rule (1738-1753), 257; taken by the Maráthás (1753), 258; recovered by Momin Khán II. (1755), 258; re-taken by the Maráthás (1757), 258; Marátha rule (1757-1817), 258-260; taken by the British and made over to Fateh Singh Gáikwár (1780), 258, 259; its state in 1781, 259; restored to the Peshwa (1783), 259; famine (1790), 259; the Peshwa's Governor driven out (1800), 259; the Peshwa's share in the city farmed by the Gáikwár (1800-1814), 260; famine and pestilence (1812-1813), 260; Peshwa's management (1814-1817), 260; ceded to the British (1817), 260; its state in 1817, 260; growth of trade (1817-1855), 261; the mutiny year (1857), 261; its state for the last 20 years (1858-1878), 262; trade and manufactures, 306-308; population, 292-294; houses and *pols*, 294-295; style of living, 295; caste lodges, 295-300; Musalmán architecture, 262-266; places of interest and worship: Sidi Bashir's mosque, 267; railway station mosque, 267; City Walls, 267-268; Queen's mosque in Sárangpur, 269; Muhammad Ghaus' mosque, 269; Ráni Sipri or Asni's mosque, 269-270; A'sa Bhil's mound and mosque, 270; Dastur Khán's mosque, 270; Haibat Khán's ditto, 270; Jáma mosque, 271-272; tombs of Sultán Ahmad and his Wives, 272; Dutch factory, 272; English ditto, 273; Three Gateways, 273; Káranj, 273; Malik Shábán's mosque, 274; A'zam Khán's palace or the city jail, 274; Bhadar or citadel, 275-277; Sultán Ahmad's mosque, 276; Mánek tower and Máneknáth Godadia, 276; Sidi Syed's mosque, 276-277; Ibráhim Kuli Khán's tomb, 277; Gáikwár's *haveli*, 277; Shuját Khán's mosque, 278; Sháh Wajih-ud-din's tomb, 278; Syed A'lam's mosque, 278; Queen's mosque in Mirzápur, 278-279; Sháhápur mosque, 279; Sultán Kutb-ud-din's ditto, 279; Muháfiz Khán's ditto, 279; Animal home, *pánjrápol*, 280; Nav Gaz Pirs, 280; Old or Jahángir's mint, 280; Musa Suhág's mosque, 281; Dádá Harir's well, 282; Máta Bhaváni's ditto, 282-283; Sháhi Bág, 283; Adálaj well, 284; Miya, Khán Chishti's

mosque, 284; Achut Bibi's ditto, 284; Darya Khán's tomb, 284; Syed Usmán's mosque and tomb, 284; Malik Shábán's lake, 285; Kánkariya lake, 285; Dutch tombs, 285; Malik A'lam's mosque, 285; Sháh A'lam, 286; Batva, 287; Pirána, 287-290; Bába Lului's mosque, 290; Mir Abu Turáb's tomb, 290-291; A'zam and Mozam Kháns' tombs, 291; Sarkhej, 291-292; Chánd Suraj Mehel, 317; A lam Chishti's mosque, 317; Sidi Hálim's ditto, 317; Kázi Muhammad Chishti's ditto, 317; Malik Shábán's ditto, 317; Sháh Ali Rozak's tomb, 318; Chandan Talávdi, 318; Daulat Khán's mosque, 318; Malik Sárang's ditto, 319; Ráni Bibi's tomb, 319; Nawáb Sardár Khán's mosque and tomb, 319; Sidi Salim's *haveli*, 319; Hatising's temple, 280-281; Sántidás' temple, 285; other Jain temples, 300-302; Jain convents, *apásrás*, 321, 323-324; Bráhman temples: Bhadra Káli, 275; Sadubái Deri, 317; Rám, Krishna, Vithoba, Hanumán, and Shiv's temples in the Bhadar, 321; Svámi Náráyan, 279-280; Gosái Mahárája's Natvarlál and Shámlál, Ambáji Máta, and Mohota Rámji, in the Daryápur division, 322; Kabirpanthi, Dvárkánáthji, Rámsnehi, Ranchhodji, and Rádha Vallabhji, in the Khádiya division, 324; Prárthana Samáj temple, 325-327; Pársi fire temple, 327; Christian churches, 279; fairs, Hindu, 302-304 and Musalmán, 304-305; burying and burning grounds, 270-271, 316-317; public offices, 308-309; education, 309-311; municipality, 311-315; floods, (1714-1875), 313; fires, (1877), 262; water-works, 314; health, 315; hospitals, 315, 316; markets, 316; divisions, 317-332: within the walls, in 1824, 317-320 and in 1879, 320-327; suburbs, 327-331; cantonment, 331-332.

Agates, 22.
Age, population according to, 33.
Agrarian crimes, 197.
Agriás, salt makers, 36, 117, 119.
Agriculture, 49-58.
Agricultural population, 49.
Agricultural stock, 53.
Animals, 24.
Ants, 61.
A'nt, fictitious currency, 73.
Architecture, 262-266.
Area of district, 1.
Area under tillage, 50.
Armenians, 255, 285.
Arnej, place of interest, 332.
Artisans. See Craftsmen.
Asával, old town, 250.
Aspect of district, 2.
Assessed taxes, 201.
Assessment. See Land.
Báptis and Verás, cesses, 157, 165, 166.
Báharvatiás, outlaws, 197.
Bad Seasons. See Famines.
Balance sheet, 200-205.
Bank of Bombay, 65.
Bávliári, creek, 15, port, 333.
Barvála, town, 332.
Bards and actors, 37.
Beggars, 40.
Bhadiád, place of fair, 333.
Bhádhar, river, 7.
Bhál, tract of land, 2.
Bhimnáth, place of fair, 333.
Bhogáva, river, 7.
Birds, 27.
Births and deaths, 228.
Blankets, manufacture of, 139.
Blind, 33.
Bokh, natural hollow, 9.
Borrowers, 68.
Boundaries, 1.
Bráhmans, 34.
Bridges, 83.
Brocade, 135.
Bujva, natural hollow, 9.

Calico-Printing, 133.
Canals, 50.
Capitalists, 63.
Castes, 34-39.
Cattle. See Stock.
Cattle disease, 228.
Census. See Population.
Chandola, reservoir, 17.
Christians, 42.
Chuvál, tract of land, 2.
Chuvália Kolis, 153.
Climate, 20.
Cloth, manufacture of, 131.
Colleges, 217.
Communication. See Roads and Railways.
Communities, 46.
Condition of the district, 88, 89, 146, 150 153.
Cold, injurious to crops, 62.
Copper and brass, workers in, 129.
Courts, number and working of, 192.
Cotton, cultivation of, 55.
Cotton gins, 102.
Cotton presses, 103.
Craftsmen, number and state of. 37, 140.
Creeks, 13, 15.
Crime and police, 198.
Crops, 53.
Cultivators. See Peasants.
Currency, 71.

Day-Labourers. See Labouring Classes.
Daskroi, sub-division: Boundary; area; aspect; climate; water; soil; holdings; rental; stock; produce; people, 232-235.
Deaf and dumb, 33.
Debtors, 193.
Density, 2, 31.
Depressed Classes, 39.
Development of the district (1846-1877), 190.
Dhandhuka, sub-division: Details same as those of Daskroi, 243-245.
Dhandhuka, town, 333.
Dharamshálás. See Rest-houses.
Dholera, creek, 13; town, 334; *Dharám* taláv, 208.
Dholka, sub-division: Details same as those of Daskroi, 241-243.
Dholka, town, 337.
Diseases, 225.
Dispensaries, 227.
Domestic animals, 24.
Dutch, in Ahmedabad (1618-1744) 253; in Sarkhej, 272, 292.
Dutch tombs, 285.

Earthquakes, 1819, 1821, 1864, 261.
Education. See Instruction.
Educational cess, 206.
Ellis bridge, 12.
Elphinstone, The Hon'ble Mountstuart, Administrative changes (1821), 159.
English, traders (1613-1760), 253, 273; as conquerors (1780), 258; rulers (1817-1878), 143.
Excise, revenue from, 201.
Expenditure. See Balance sheet.
Exports and imports. See Trade.

Factories, English, Dutch, 272, 273.
Factories, Steam, 131.
Fallow lands, 53.
Famines. See Scarcity.
Females, proportion of, in population, 32.
Ferries. See Fords and Ferries.
Fibres, cultivation of, 53.
Fires, 262.
Fish, 29.
Fishers, 38.
Floods, 9-12.
Fords and ferries, 83.
Forests, 23.

Galálpati, cess, 93.
Gambling, *Váida,* 66.
Gámetis, proprietors, 152, 179.
Ghásdána, [illegible] 154.
Ghásia, salt, 117.
Girásiás, 150.

Girls' schools, 210.
Gogha, sub-division: Details same as those of Daskroi, 246-248.
Gogha, town, 339.
Gold foil, 128.
Gold and silver thread, manufacture of, 127.
Gold work, 126.
Grain, advances of, 70; cultivation of, 53.

Harsol, town, 345.
Herdsmen, 38.
Hills, 4.
History, 142.
Holdings, size of, 52.
Hospitals, 225.
Houses, number of, 46.
Hundis, bills of exchange, 65.
Husbandmen. See Peasants.

Idiots, 33.
Idol ornaments, 129.
Immigration. See Migration.
Imports and exports. See Trade.
Indian millet, cultivation of, 54.
Indigo, cultivation of, 58.
Infanticide, 36.
Inlaid mother of pearl, 139.
Insanes, 33.
Instruction, statistics of, 209-217.
Insurance, 65.
Interest, rates of, 71.
Inundations. See Floods.
Investments, forms of, 67.
Iron, 22.
Irrigation, 50.
Islands, 20.
Ivory bracelets, 139.

Jails, 199.
Justice, 191-199.

Kálichitri, system of pounding cattle, 196.
Kaniar, tract of land, 2.
Kánkara, salt, 117.
Kánkariya, reservoir, 17.
Káraktál, ruined town, 345.
Kasbátis, 147.
Khán, reservoir, 19.
Khápri, 61.
Khárághoda salt works: Salt how made, st and distributed; outturn and sale; 119-124.
Khári, river, 6.
Khun, port, 345.

Labouring Classes, 39, 79.
Lakes, 16-19.

Land:
Acquisition (1802 and 1817); revenue staff, 1878; state of the district in 1803; classes of villages in 1803; Kasbátis; rent how fixed and realized in 1803; Col. Walker's proposals; state of the district, 1814; system of management and changes, 1814-1820; Mr. Elphinstone's measures, 1821; first survey and its result, 1820-1826; state of the district between the first and the second surveys, 1826-1853; second survey, 1853-1863; Tálukdárs; Parántij Kolis; Seasons; 143-190.
Land revenue, 200.
Land and sea, trade by, 97-104.
Lavád, arbitration court, 194.
Leaf-plates, 135.
Leaf-printing, 129.
Leather, workers in, 139.
Lepers, 33.
Libraries, 217.
Light-houses, 84.
Limestone, 22.
Local funds, 206.
Locusts, 61.

Magistrates, number of, 195.
Mahájan, trade guild, 106.
Males, proportion of, in population, 32.
Maláv, reservoir, 19.
Malik Shábán, reservoir, 18.
Mándal, fort and town, 345.
Mansar, reservoir, 18.
Manufactures, 116-140.
Manufacturers. See Craftsmen.
Means of communication. See Roads and Railways.
Measures. See Weights and Measures.
Mehvási, unsettled classes, 2, 186.
Meshva, river, 7.
Mercantile classes. See Traders.
Migration, 47.
Mildew, 62.
Millet, cultivation of, 54.
Minarets, 265.
Minerals, 22.
Modása, town, 346.
Money-lenders. See Capitalists.
Mortgages, 74.
Mosques. See Ahmedabad city.
Multán, reservoir, 19.
Municipalities, 207.
Musalmáns, 40.

Nagar Seth, or Mayor of the City, 90, 113.
Nalkántha, 2.
Nal, lake, 16.
Newspapers, 217.

Occupations of the people, 34.
Offences, number of, 196, 198.
Oil-pressing, 134.
Oil-seeds, cultivation of, 58.

Pancháyat, 106.
Pánjrápols, animal homes, 114.
Paper, manufacture of, 133.
Parántij, sub-division: Details same as those of Daskroi, 230-232.
Parántij, town, 346.
Parántij Kolis, 154, 186.
Pársis, 42.
Pátidárs, 156.
Pátri, town, 347.
Peasants, 35, 58.
Personal servants, 38.
Physical features. See Aspect.
Pirates, 87.
Piram, 348.
Plague, 218-224.
Plough of land, size of, 52.
Ploughs: introduction of European, 52.
Police: cost, strength, working, 197, 198.
Pols, city house-groups, 294.
Population, census of 1846, 1851, and 1872, 31; sub-divisions, sex, age, 32; religion, occupation, and race, 34-44; town and country population, 45; people able to read and write, 210.
Portuguese, 87, 251.
Post, 85.
Ports. See Dholera and Gogha.
Pottery, 126.
Prices, 76.
Private schools, 209.
Pulses, cultivation of, 53.
Pupils, number and race of, 211.

Railway, length, stations, traffic, 97, 100-104.
Rainfall, 20.
Ránpur, fort and town, 350.
Rates of assessment. See Land.
Registration, 195.
Religion, 34.
Reservoirs. See Lakes.
Rest-houses, 83.
Revenue staff (1803), 144, 146.
Revenue and expenditure. See Balance sheet.
Rice, cultivation of, 57.
Rivers, 5-9.
Roads, 81.
Rohor, natural hollow, 9.

Sábarmati, bridge, 83.
Sábarmati, river, 5.
Sadávarts, alms-houses, 112.

Salt, manufacture of, 116-124.
Saltpetre, 125.
Salt works. See Khárághoda salt works.
Sárkhej, reservoir, 18.
Scarcity, years of, 58.
Schools, number of, 209.
Sánand, sub-division: Details same as those of Daskroi, 238-240.
Sánand, town, 353.
Sáragvála, old port, 353.
Sea ports. See Ports.
Seasons (1862-1877), 188.
Shipping, 84.
Shoemakers, 140.
Sihor, old city, 353.
Silks, manufacture of, 135.
Silk-weaving, 135-139.
Size of holdings. See Holdings.
Small Cause Court, 194.
Snuff, 134.
Soap, 134.
Societies, 217.
Soil, distribution, 50; varieties, 49.
Sonária, reservoir, 19.
Staff, judicial, (1830-1878), 192.
Steam factories, 131.
Steam printing, 133.
Stock. See Agricultural Stock.
Stones, for building, 22.
Sub-divisional accounts, 230-248.
Sugarcane, cultivation of, 58.
Survey, (1820-1826), 160-169; (1853-1863), 173-178.

Tálukdars:
Origin; classes; position; condition; division of shares and household relations with tenants; 151, 179-185.
Telegraph, 86.
Temperature, 20.
Tenures of land. See Land.
Tin foil, 128.
Tin-plating, 129.
Todar Mal's survey, 142.
Tolls, 82.
Tombs. See Ahmedabad City.
Town duties, 89.
Trade: History of, Hindu period (750-1300), 86; Ahmedabad Kings (1400-1570), 87; Moghal Viceroys (1570-1700), 88; Eighteenth Century, 89; Nineteenth Century, trade by land, by sea, in cotton, grain, oilseeds, wool, silk, 93-104.
Trade guilds, origin and growth; constitution, membership; apprenticeship; jurisdiction; communal funds; sectarian bickerings, Nagar Seth, animal homes, 106-115.
Traders, 35, 105.
Transit duties, 89.
Trees, 23.
Turning, 130.

Vadágra salt, 117.
Vaccination, statistics of, 227.
Vághpur, place of interest, 354.
Vautha, fair, 354.
Vás, 153.
Vasváyá, 106.
Verás, 157.
Vessels. See Shipping.
Village communities. See Communities.
Village education, 217.
Villages, number and population, 54; *rásti*, settled, and *mehvási*, unsettled, 146; *khálsa*, Government, 156; *girásia*, Rajput, 156.
Village money-lenders. See Capitalists.
Viramgám, sub-division: Details same as those of Daskroi, 235-237.
Viramgám, town, 354.
Vital statistics. See Births and deaths.

Wages, 74.
Walker, Col., Proposals (1803), 149.
Weights and measures, 79.
Wheat, cultivation of, 54.
Wild animals, 25.
Woodwork, 130.
Wood bracelets, 130.
Writers, 35.

Years of scarcity. See Scarcity.